

August 14, 2015

## Draft 3

Mr. Jack Yang  
Artesan Development, LLC

Via: E-mail [jyang628@gmail.com](mailto:jyang628@gmail.com)

**RE: Meadowbrook Gardens  
Meadowbrook Lane  
Mansfield, CT  
Traffic Impact Report  
Our File: 15131**

Dear Mr. Yang:

This report documents the findings of a traffic impact study for a proposed expansion of the existing Meadowbrook Gardens apartment complex located on Meadowbrook Lane in the Town of Mansfield, Connecticut. Meadowbrook Gardens is located on the south side of Meadowbrook Lane, west of Pollack Road and east of Circle Drive. The site location is presented in Figure 1.

The purpose of this study is to estimate the amount of traffic that will be generated by the proposed expansion and to determine its impact on the adjacent roadway network. It is anticipated that this report will accompany an application to the Town of Mansfield for site plan approval.

### **Proposed Development**

The existing Meadowbrook Gardens development is approved for a total of 50 apartment units. A total of 102 parking spaces are provided on site. The site has access to Meadowbrook Lane by way of a single driveway. The driveway provides a single entering and exiting lane, separated by a raised landscaped median. The driveway approach operates under stop sign control.

The current proposal is for an expansion of up to 40 new apartment units on property adjacent to, and west of the existing site. Access to the new units will be by way of a new driveway to Meadowbrook Lane. An internal access will be provided to the existing development as well. The proposed driveway will provide a single entering and exiting lane separated by a raised landscaped median. The driveway approach will operate under stop sign control. Upon approval and completion of construction the combined

developments will consist of a total of up to 90 apartment units with a total floor area of 82,000 s.f. A total of 185 parking spaces will be provided.

### **Description of Area**

Meadowbrook Lane is a town maintained roadway that originates at an un-signalized intersection with Mansfield City Road approximately 1,000 feet west of the subject site. Meadowbrook Lane extends in an easterly direction to an all stop sign controlled intersection with Circle Drive, then past the subject site to an intersection with Pollack Road and Adeline Place. Meadowbrook Lane continues easterly to its terminus at Conantville Road. The roadway continues as Conantville Road to its terminus at Route 195, Storrs Road. Meadowbrook Lane provides approximately 18 to 22 feet of pavement with a single travel lane in each direction of travel, separated by a painted double yellow centerline. Speed bumps are located along the length of the roadway. The roadway is posted at 25 miles per hour. Land use along the roadway is residential.

Pollack Road originates at an un-signalized intersection with Meadowbrook Lane and Adeline Place and extends in a southwesterly direction a distance of approximately 750 feet to its terminus at Conantville Road. The intersection of Pollack Road with Meadowbrook Lane operates with stop sign control on the side street approaches.

Conantville Road originates at an un-signalized intersection with S.R. 632 (North Frontage Road) and the westbound off ramp from Route 6. Conantville Road extends in a northerly direction past the intersection with Pollack Road to its intersection with Meadowbrook Road. Conantville Road continues in a northeasterly direction to its terminus at Route 195.

### **Background Traffic Data**

The Connecticut Department of Transportation maintains a continuous count program of traffic volumes on the Connecticut state highway system and some local roadways. Included in the state's database are counts on Conantville Road, west of Route 195, conducted during October 2014, and one on Conantville Road, north of Pollack Road conducted during October 2011. The count west of Route 195 indicates that Conantville Road carries an average daily traffic volume (ADT) of 800 vehicles with a morning peak hour volume of 73 vehicles (8:00 a.m.) and an afternoon peak hour volume of 83 vehicles (4:00 p.m.). The count north of Pollack Road indicates an ADT of 550 vehicles, with a morning peak hour volume of 52 vehicles (8:00 a.m.) and an afternoon peak hour volume of 63 vehicles (3:00 p.m.). The ConnDOT count data are presented in Tables 1 and 2.

In order to verify and update the ConnDOT counts, our office arranged for the installation of an automated traffic volume counter on Meadowbrook Lane, immediately west of the existing Meadowbrook Gardens Driveway, from June 25, 2015 through July

1, 2015. The count indicates a weekday average volume of 450 vehicles, with a morning peak hour volume of 29 vehicles (9:00 a.m.) and a p.m. peak hour volume of 45 vehicles (4:00 p.m.). The count is presented in Table 3.

In addition to the automated counts described above, movement turning movement counts were conducted during the morning and afternoon commuter peak periods at the intersections of Meadowbrook Road with Pollack Road / Adeline Place and at Route 195 with Conantville Road. Copies of these counts are provided in the appendix. The observed traffic volumes for the a.m. and p.m. peak hours are presented in Figure 2.

A review of the files of the Town of Mansfield and the Office of the State Traffic Administration (OSTA) did not reveal any traffic impact reports that need to be considered as part of the background traffic for this proposal.

A 2% per year growth rate to a design year of 2017, or a total increase of 4%, was applied to the volumes in Figure 2. The resultant volumes are the 2017 background traffic volume. These volumes are presented in Figure 3.

#### **Site Generated Traffic and Traffic Assignment**

The proposed development is to consist of a total of up to 40 new apartment units. The combined development will consist of a total of up to 90 apartment units. The trip generation for the development was calculated utilizing the ITE *Trip Generation* report. Included in the ITE Trip generation is land use 220 – Apartments. Applying the ITE equations to the existing 50 units and the 90 unit developments yields the following trip generations. The existing 50 units have a trip generation potential of 427 trips on a daily basis, with an a.m. peak hour of 28 trip made up of 6 entering trips and 22 exiting trips and a p.m. peak hour of 45 trips made up of 29 entering trip and 16 exiting trips. The combined 90 unit development has a trip generation potential of 669 trips on a daily basis, with an a.m. peak hour of 48 trips made up of 10 entering trips and 38 exiting trips and a p.m. peak hour of 67 trips made up of 44 entering trips and 23 exiting trips. By subtracting the trip generation of the 90 units from the existing 50 units, the trip generation for the proposed 40 units can be determined. Based on this methodology the proposed expansion can be expected to generate a total of 242 trips on a daily basis, with an a.m. peak hour of 20 trips made up of 4 entering trips and 16 exiting trips and a p.m. peak hour of 22 trips made up of 15 entering trip and 7 exiting trips. A summary of the trip generation results are presented as Table 4.

The existing development is currently under construction and not yet fully occupied. To be conservative in our analysis we have assumed that the traffic from all 90 units is new traffic. In addition, we have assumed a directional distribution consistent with the original Traffic Engineering Solutions report. That distribution has 67% of the site traffic oriented to and from the west and 67% to and from the east on Meadowbrook Lane.

This distribution overestimates the site generated traffic by 34% but accounts for any variation in distribution.

Figure 4 presents the trip distribution used in this report. Figure 5 presents the site generated traffic based on the combined development traffic from Table 4 and the distribution in Figure 4. By adding the site generated traffic in Figure 5 to the background traffic volumes in Figure 3, the combined traffic volumes upon completion of the development can be determined. These volumes are presented in Figure 6.

### **Capacity Analysis and Traffic Impact**

Capacity analyses were completed for the background and combined traffic volumes at the following intersections:

- Route 195 at Conantville Road
- Meadowbrook Lane at Pollack Road and Adeline Place
- Meadowbrook Lane and the Meadowbrook Garden Driveway

The analyses were completed to determine the operational condition of the intersections before and after the introduction of site traffic, thereby determining the impact of site traffic on the intersection. The methodology employed is found in the Highway Capacity Manual (HCM), published by the Transportation Research Board. This methodology results in an intersection rating in terms of "Level of Service" (LOS), which defines the amount of delay expected at the intersection. The Levels of service results are presented in Table 5. A brief description of each intersection is presented here.

**Route 195 at Conantville Road** – This is an existing un-signalized "T" intersection with Route 195 (Storrs Road) oriented in the north/south direction. Conantville Road approaches from the west. The northbound and southbound Route 195 approaches each provide a single lane approach and operate free of control. The Conantville Road approach provides a single lane and operates under stop sign control. An analysis indicates that the northbound and southbound Route 195 approaches operate at a LOS A during peak hours under the background traffic volume conditions. The Conantville Road approach operates at a LOS B during the morning peak hour and at a LOS C during the p.m. peak hour under the background conditions. With the introduction of the site generated traffic the Route 195 approaches will continue to operate at a LOS A. The Conantville Road approach will operate at a LOS C during the a.m. peak hour and at a LOS D during the p.m. peak hour. The increase in average vehicular delay is approximately 1 second during the morning peak hour and approximately 3 seconds during the p.m. peak hour.

**Meadowbrook Lane at Pollack Road / Adeline Place** - This is an existing four way un-signalized intersection. Meadowbrook Lane is oriented in the east/west direction. Meadowbrook lane provides a single lane on each approach and operates free of

control. Pollack Road approaches from the south, provides a single lane approach and operates under stop sign control. Adeline lane approaches from the north, provides a single lane approach and operates under stop sign control. An analysis indicates that all approaches will operate at a LOS A during peak hours under the background and combined traffic volume conditions.

**Meadowbrook Lane at Meadowbrook Gardens Driveway** – There is one existing and one proposed site driveway. For purposes of this analysis we have assumed a single driveway. Meadowbrook Lane lies in an east/west orientation. Meadowbrook lane provides a single lane on each approach and operates free of control. The Meadowbrook Gardens Driveway approaches from the south and provides a single lane approach and operates under stop sign control. An analysis of the intersection indicates that all movements will operate at a LOS A during peak hours under the combined traffic volume conditions.

### **Site Access**

The existing development has access to Meadowbrook Lane by a single un-signalized driveway. The driveway provides 24 feet of pavement with a single 12 foot lane for both entering and exiting traffic separated by a raised landscaped median. The driveway operates under stop sign control.

The proposed site driveway will also be to Meadowbrook Lane, located approximately 350 feet west of the existing site driveway. The proposed driveway will provide 24 feet of pavement with a single 12 foot lane for both entering and exiting traffic separated by a raised landscaped median. The driveway operates under stop sign control.

The available sight distances at the two site driveways are in excess of 500 feet in each direction. The 500 foot sight distance meets the current ConnDOT criteria for an approach speed of 45 miles per hour. Meadowbrook Road is posted at 25 miles per hour. An 85% speed of 35 mph was recorded by the Town of Mansfield during August 2007.

The driveway has been designed to accommodate an SU-30 design vehicle and will be capable of providing access to emergency vehicles.

### **Conclusion**

The current proposal is for an expansion of up to 40 new apartment units to the existing 50 apartment unit complex known as Meadowbrook Gardens. The proposed development is projected to generate an additional 20 trips during the morning peak hour and an additional 22 trips during the p.m. peak hour. Based on this analysis, it is our professional opinion that the existing roadway network has sufficient excess

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capacity and will be capable of accommodating the increase in traffic volumes associated with this proposed expansion with little or no change in the operating condition of the roadway network. The site driveway is properly designed to accommodate the anticipated driveway volumes and it will operate at acceptable levels of service. The available sight distances from the proposed site driveway meet current ConnDOT requirements for the 85% speed.

We appreciate the opportunity to provide this analysis to you. A representative from our firm will be available to present testimony in support of your application at a hearing upon your request. Please notify me of the proposed hearing schedule as soon as is practicable. If you require any additional information, please do not hesitate to contact us.

Very truly yours,  
**F. A. HESKETH & ASSOCIATES, INC.**

Scott F. Hesketh, P.E.  
Manager of Transportation Engineering

cc:

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TABLE 1  
ConnDOT TRAFFIC VOLUMES  
CONANTVILLE ROAD WEST OF ROUTE 195  
STATION NO. 077 2068

|       | 15-Oct-14<br>WEDNESDAY |           |              | 16-Oct-14<br>THURSDAY |           |              | 17-Oct-15<br>FRIDAY |           |              |
|-------|------------------------|-----------|--------------|-----------------------|-----------|--------------|---------------------|-----------|--------------|
|       | <u>EB</u>              | <u>WB</u> | <u>Total</u> | <u>EB</u>             | <u>WB</u> | <u>Total</u> | <u>EB</u>           | <u>WB</u> | <u>Total</u> |
| 12:00 |                        |           |              | 1                     | 3         | 4            | 1                   | 4         | 5            |
| 1:00  |                        |           |              | 0                     | 1         | 1            | 0                   | 2         | 2            |
| 2:00  |                        |           |              | 0                     | 2         | 2            | 1                   | 2         | 3            |
| 3:00  |                        |           |              | 1                     | 1         | 2            | 0                   | 1         | 1            |
| 4:00  |                        |           |              | 1                     | 1         | 2            | 2                   | 1         | 3            |
| 5:00  |                        |           |              | 5                     | 0         | 5            | 3                   | 1         | 4            |
| 6:00  |                        |           |              | 10                    | 6         | 16           | 14                  | 9         | 23           |
| 7:00  |                        |           |              | 24                    | 31        | 55           | 31                  | 33        | 64           |
| 8:00  | 43                     | 30        |              | 32                    | 40        | 72           |                     |           |              |
| 9:00  | 27                     | 32        | 59           | 25                    | 31        | 56           |                     |           |              |
| 10:00 | 27                     | 18        | 45           | 28                    | 14        | 42           |                     |           |              |
| 11:00 | 31                     | 33        | 64           | 36                    | 30        | 66           |                     |           |              |
| 12:00 | 34                     | 34        | 68           | 35                    | 30        | 65           |                     |           |              |
| 1:00  | 26                     | 24        | 50           | 33                    | 23        | 56           |                     |           |              |
| 2:00  | 34                     | 36        | 70           | 31                    | 32        | 63           |                     |           |              |
| 3:00  | 47                     | 38        | 85           | 37                    | 43        | 80           |                     |           |              |
| 4:00  | 40                     | 43        | 83           | 39                    | 39        | 78           |                     |           |              |
| 5:00  | 33                     | 20        | 53           | 34                    | 23        | 57           |                     |           |              |
| 6:00  | 26                     | 33        | 59           | 27                    | 27        | 54           |                     |           |              |
| 7:00  | 17                     | 13        | 30           | 16                    | 18        | 34           |                     |           |              |
| 8:00  | 8                      | 14        | 22           | 12                    | 13        | 25           |                     |           |              |
| 9:00  | 6                      | 6         | 12           | 10                    | 8         | 18           |                     |           |              |
| 10:00 | 9                      | 5         | 14           | 6                     | 5         | 11           |                     |           |              |
| 11:00 | 1                      | 2         | 3            | 1                     | 2         | 3            |                     |           |              |
|       | 409                    | 381       | 790          | 444                   | 423       | 867          | 52                  | 53        | 105          |

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**2014 ADT = 800 for station2068 in Mansfield**

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**TABLE 2**  
**ConnDOT TRAFFIC VOLUMES**  
**CONANTVILLE ROAD NORTH OF POLLACK ROAD**  
**STATION NO. 077 2068**

|       | <b>3-Oct-11</b>  | <b>4-Oct-11</b>  |
|-------|------------------|------------------|
|       | <b>MONDAY</b>    | <b>TUESDAY</b>   |
|       | <b><u>EB</u></b> | <b><u>EB</u></b> |
| 12:00 |                  | 3                |
| 1:00  |                  | 2                |
| 2:00  |                  | 0                |
| 3:00  |                  | 1                |
| 4:00  |                  | 2                |
| 5:00  |                  | 2                |
|       |                  | <hr/>            |
| 6:00  |                  | 15               |
| 7:00  | 31               |                  |
| 8:00  | 52               |                  |
|       | <hr/>            |                  |
| 9:00  | 39               |                  |
| 10:00 | 30               |                  |
| 11:00 | 34               |                  |
| 12:00 | 43               |                  |
| 1:00  | 44               |                  |
| 2:00  | 36               |                  |
|       | <hr/>            |                  |
| 3:00  | 63               |                  |
| 4:00  | 52               |                  |
| 5:00  | 59               |                  |
|       | <hr/>            |                  |
| 6:00  | 27               |                  |
| 7:00  | 29               |                  |
| 8:00  | 17               |                  |
| 9:00  | 7                |                  |
| 10:00 | 6                |                  |
| 11:00 | 5                |                  |
|       | <hr/>            |                  |
|       | 574              | 25               |

**2011 ADT = 550 for station 87 in Mansfield**



**TABLE 3**  
**F.A. HESKETH TRAFFIC VOLUME COUNT**  
**MEADOWBROOK ROAD WEST OF SITE DRIVEWAY**

|       | <u>29-Jun</u><br><u>Monday</u> | <u>30-Jun</u><br><u>Tuesday</u> | <u>1-Jul</u><br><u>Wednesday</u> | <u>25-Jun</u><br><u>Thursday</u> | <u>26-Jun</u><br><u>Friday</u> | <u>Average</u> | <u>27-Jun</u><br><u>Saturday</u> | <u>28-Jun</u><br><u>Sunday</u> |
|-------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|--------------------------------|----------------|----------------------------------|--------------------------------|
| 12:00 | 0                              | 0                               | 1                                |                                  | 2                              | 1              | 2                                | 2                              |
| 1:00  | 3                              | 3                               | 1                                |                                  | 0                              | 2              | 4                                | 1                              |
| 2:00  | 0                              | 0                               | 0                                |                                  | 0                              | 0              | 1                                | 2                              |
| 3:00  | 1                              | 2                               | 1                                |                                  | 1                              | 1              | 3                                | 1                              |
| 4:00  | 1                              | 0                               | 0                                |                                  | 0                              | 0              | 1                                | 2                              |
| 5:00  | 3                              | 1                               | 4                                |                                  | 3                              | 3              | 3                                | 4                              |
| 6:00  | 8                              | 13                              | 10                               |                                  | 7                              | 10             | 1                                | 1                              |
| 7:00  | 13                             | 22                              | 19                               |                                  | 17                             | 18             | 7                                | 2                              |
| 8:00  | 22                             | 23                              | 20                               |                                  | 22                             | 22             | 12                               | 9                              |
| 9:00  | 15                             | 21                              | 20                               |                                  | 29                             | 21             | 24                               | 12                             |
| 10:00 | 39                             | 39                              | 17                               | 27                               | 28                             | 30             | 28                               | 19                             |
| 11:00 | 19                             | 27                              | 30                               | 35                               | 35                             | 29             | 33                               | 19                             |
| 12:00 | 39                             | 32                              | 43                               | 40                               | 36                             | 38             | 21                               | 33                             |
| 1:00  | 33                             | 39                              | 38                               | 24                               | 33                             | 33             | 29                               | 20                             |
| 2:00  | 23                             | 28                              | 34                               | 41                               | 27                             | 31             | 36                               | 24                             |
| 3:00  | 31                             | 41                              | 36                               | 36                               | 31                             | 35             | 17                               | 21                             |
| 4:00  | 36                             | 45                              | 41                               | 36                               | 40                             | 40             | 21                               | 27                             |
| 5:00  | 28                             | 33                              | 36                               | 40                               | 35                             | 34             | 26                               | 19                             |
| 6:00  | 20                             | 31                              |                                  | 34                               | 37                             | 31             | 15                               | 15                             |
| 7:00  | 22                             | 29                              |                                  | 28                               | 36                             | 29             | 11                               | 18                             |
| 8:00  | 24                             | 22                              |                                  | 13                               | 20                             | 20             | 16                               | 11                             |
| 9:00  | 18                             | 13                              |                                  | 8                                | 12                             | 13             | 12                               | 4                              |
| 10:00 | 9                              | 7                               |                                  | 9                                | 10                             | 9              | 5                                | 3                              |
| 11:00 | 1                              | 5                               |                                  | 2                                | 4                              | 3              | 2                                | 3                              |
|       | 408                            | 476                             | 351                              | 373                              | 465                            | 451            | 330                              | 272                            |

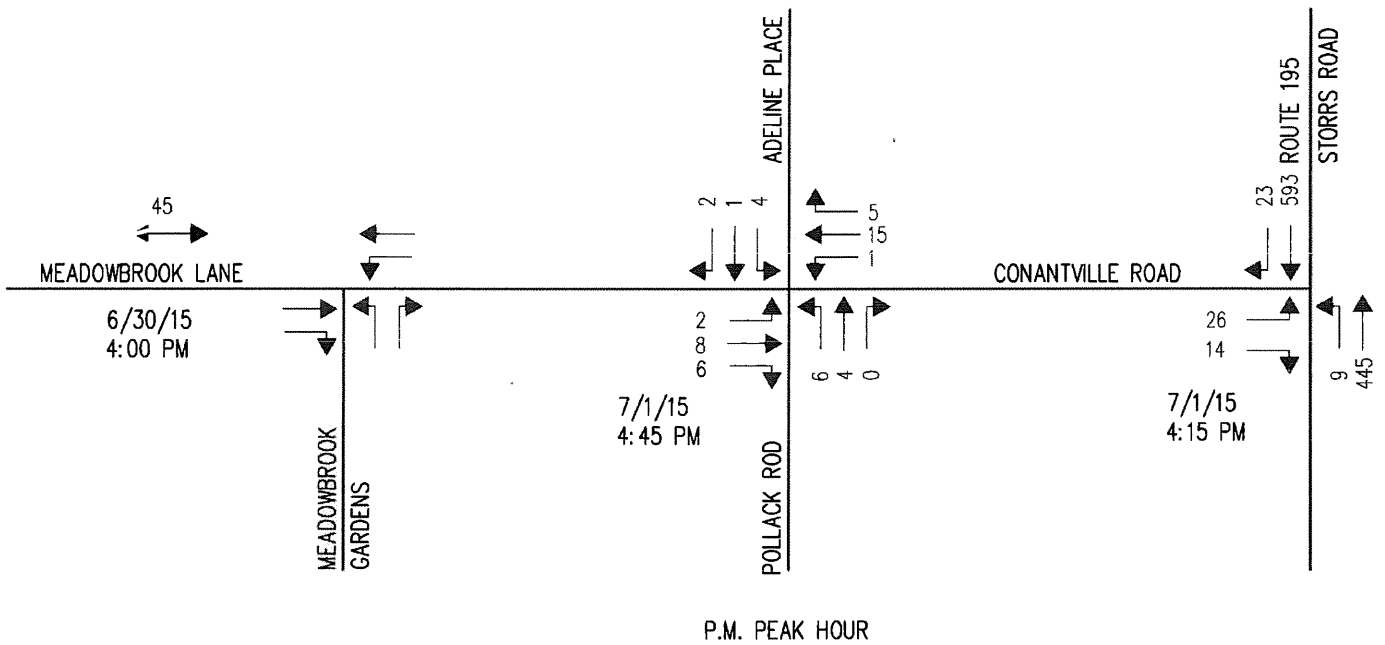
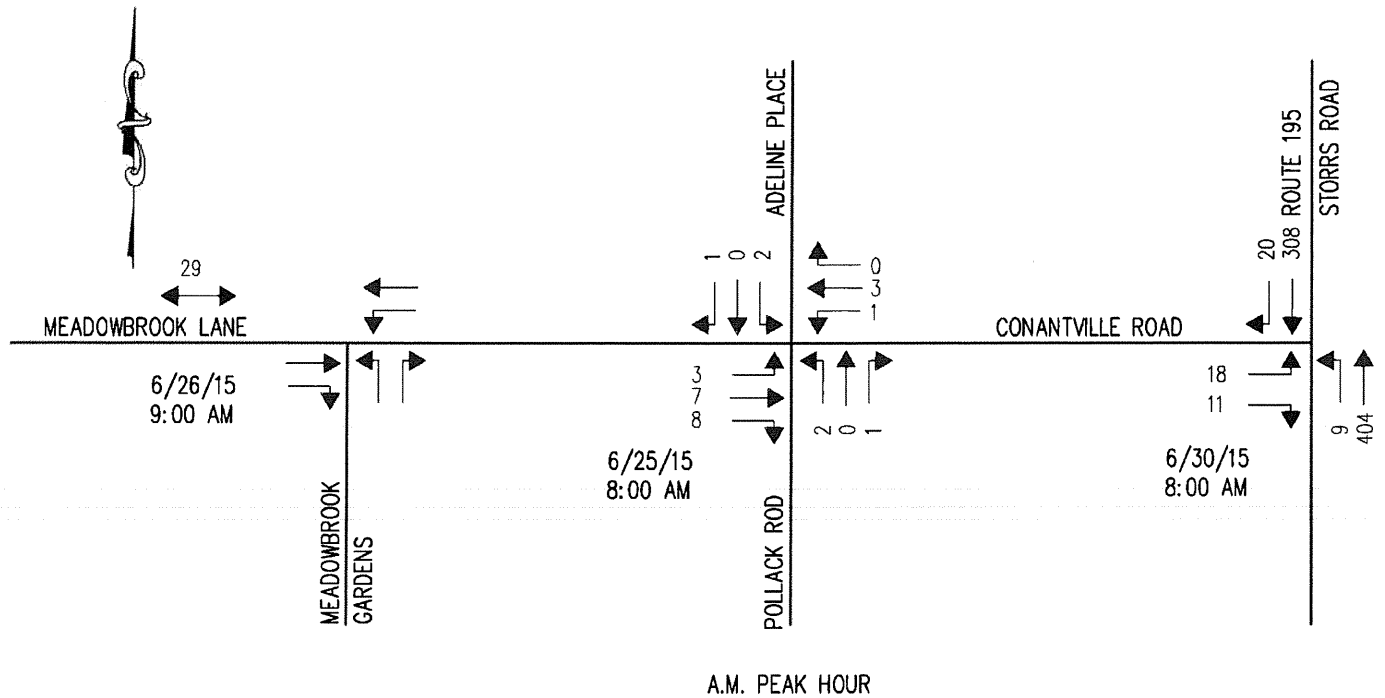
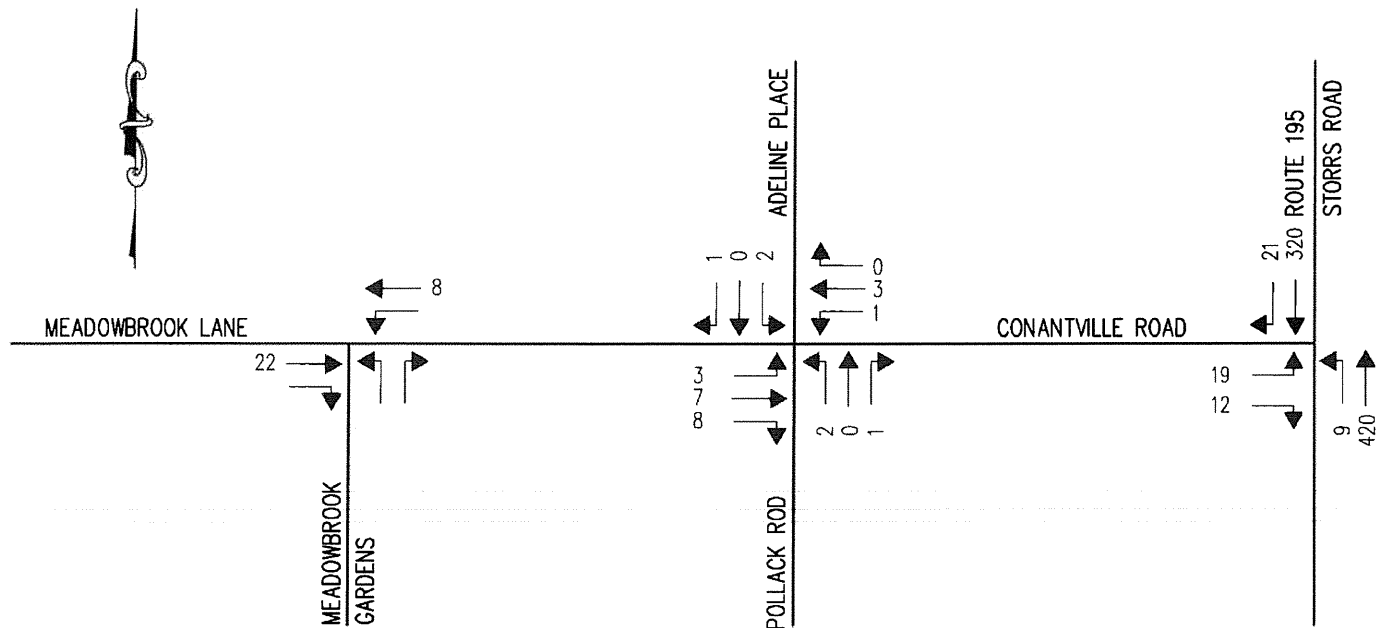


FIGURE 2

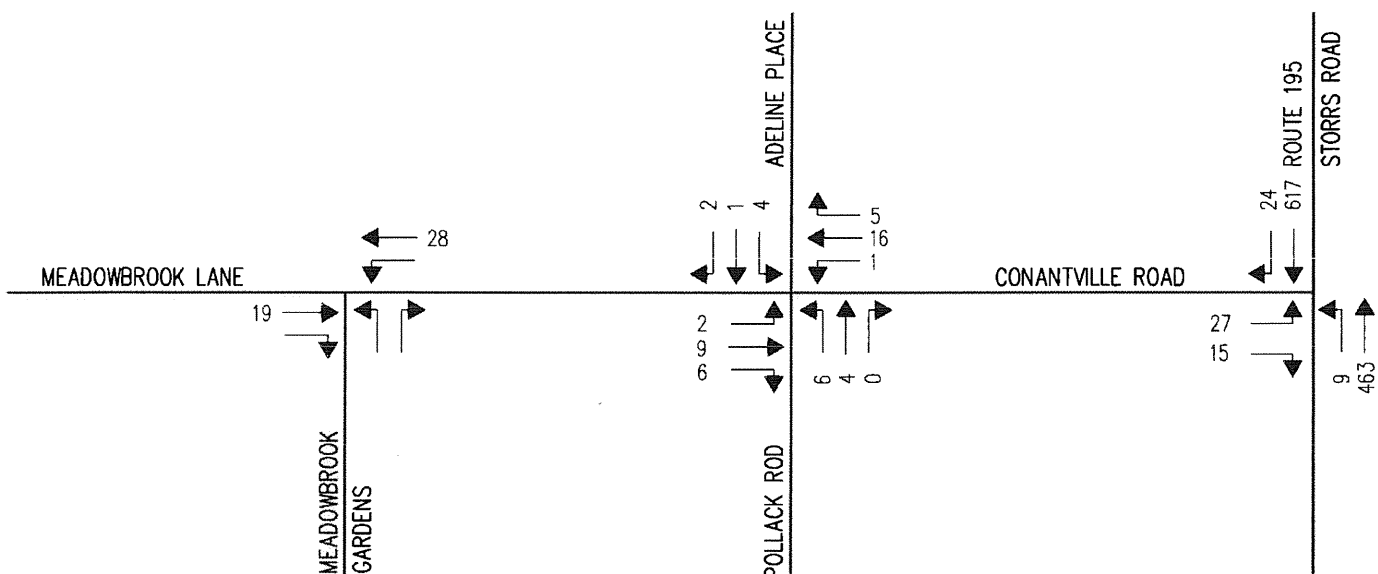
8/14/15

|                                                                   |  |                                                                             |                                              |
|-------------------------------------------------------------------|--|-----------------------------------------------------------------------------|----------------------------------------------|
| OBSERVED TRAFFIC VOLUMES<br>A.M. & P.M. PEAK HOURS                |  | F. A. Hesketh & Associates, Inc.<br>8 CREAMERY BROOK, EAST GRANBY, CT 06026 |                                              |
| MEADOWBROOK GARDENS<br>MEADOWBROOK LANE<br>MANSFIELD, CONNECTICUT |  |                                                                             | TRAFFIC<br>PLANNING<br>ENGINEERING<br>DESIGN |
|                                                                   |  |                                                                             |                                              |

NOT TO SCALE



A.M. PEAK HOUR




P.M. PEAK HOUR

FIGURE 2 INCREASED 4% TO  
DESIGN YEAR 2017

FIGURE 3

8/14/15

|                                                                   |  |                                                                                      |                                              |
|-------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|----------------------------------------------|
| 2017 BACKGROUND TRAFFIC<br>A.M. & P.M. PEAK HOURS                 |  | F. A. Heeketh & Associates, Inc.<br>6 CREAMERY BROOK, EAST GRANBY, CT 06026          |                                              |
| MEADOWBROOK GARDENS<br>MEADOWBROOK LANE<br>MANSFIELD, CONNECTICUT |  |  | TRAFFIC<br>PLANNING<br>ENGINEERING<br>DESIGN |
|                                                                   |  |                                                                                      |                                              |

NOT TO SCALE

**Table 4**  
**Trip Generation**  
**Meadowbrook Gardens**  
**Meadowbrook Lane - Mansfield, CT**

| Land Use             | Size     | ADT | A.M. Peak Hour |      |       | P.M. Peak Hour |      |       |
|----------------------|----------|-----|----------------|------|-------|----------------|------|-------|
|                      |          |     | Enter          | Exit | Total | Enter          | Exit | Total |
| Combined Development |          |     |                |      |       |                |      |       |
| Apartment            | 90 Units | 669 | 10             | 38   | 48    | 44             | 23   | 67    |
| Existing Development |          |     |                |      |       |                |      |       |
| Apartment            | 50 Units | 427 | 6              | 22   | 28    | 29             | 16   | 45    |
| Proposed Development |          |     |                |      |       |                |      |       |
| Apartment            | 40 units | 242 | 4              | 16   | 20    | 15             | 7    | 22    |

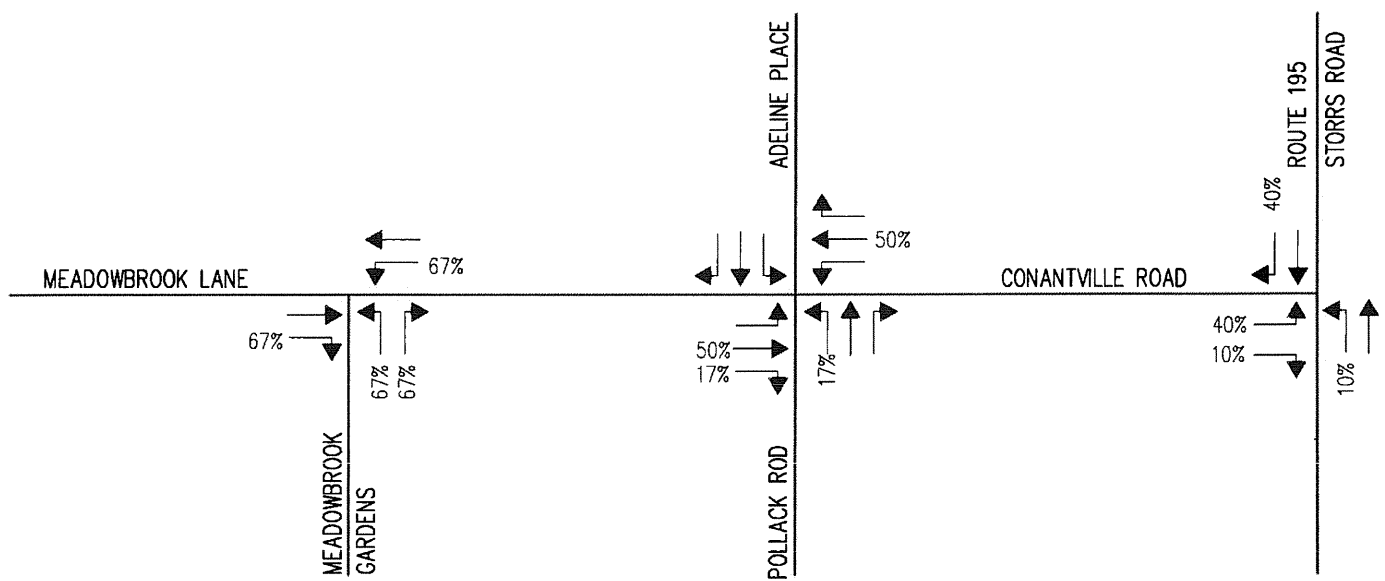


FIGURE 4

8/14/15

|                                                                          |                                                                                        |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| DIRECTIONAL DISTRIBUTION OF<br>SITE GENERATED TRAFFIC                    | <b>F. A. Hesketh &amp; Associates, Inc.</b><br>8 CREAMERY BROOK, EAST GRANBY, CT 06026 |
| <b>MEADOWBROOK GARDENS</b><br>MEADOWBROOK LANE<br>MANSFIELD, CONNECTICUT | <b>FAH</b><br>TRAFFIC<br>PLANNING<br>ENGINEERING<br>DESIGN                             |

NOT TO SCALE

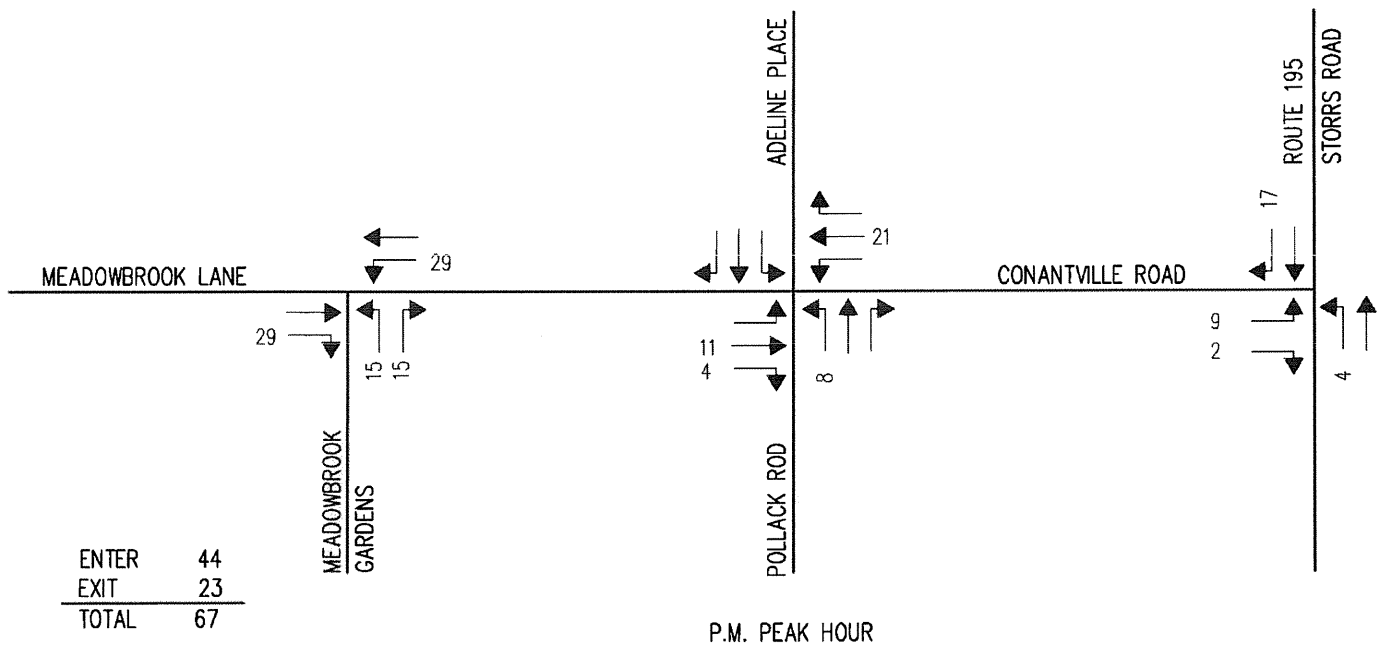
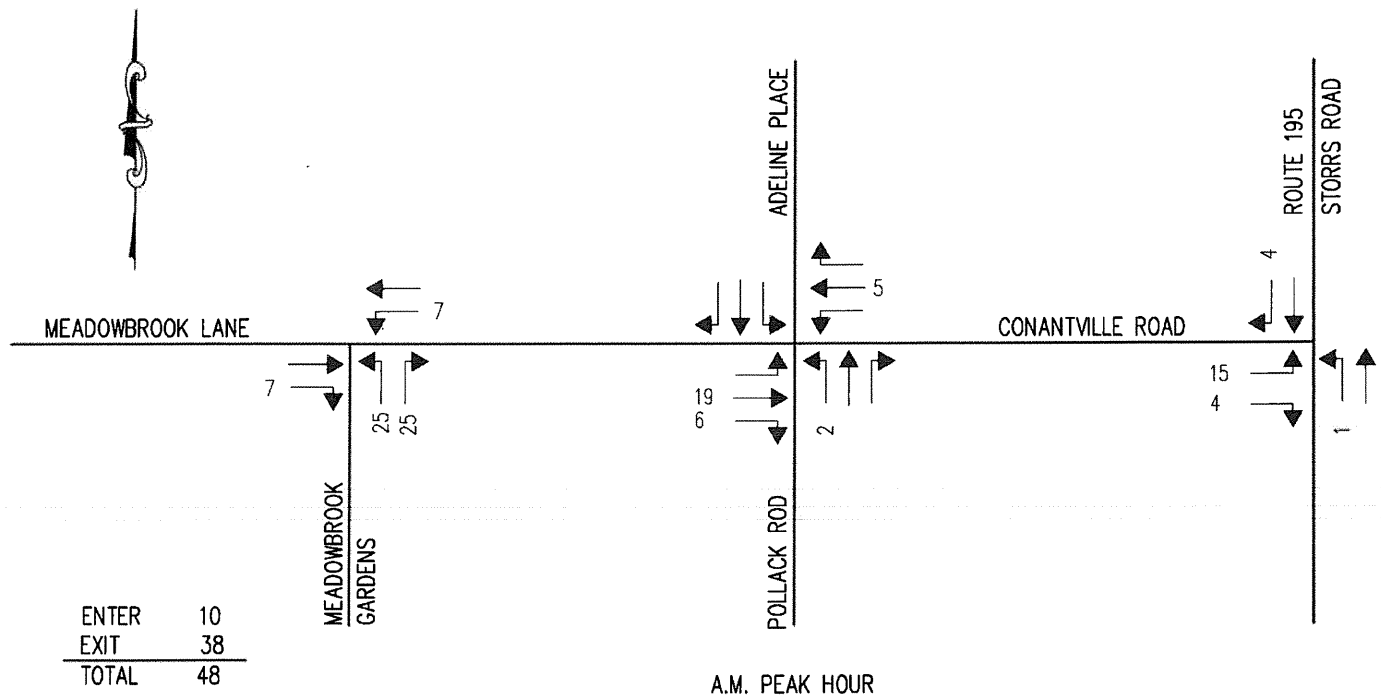
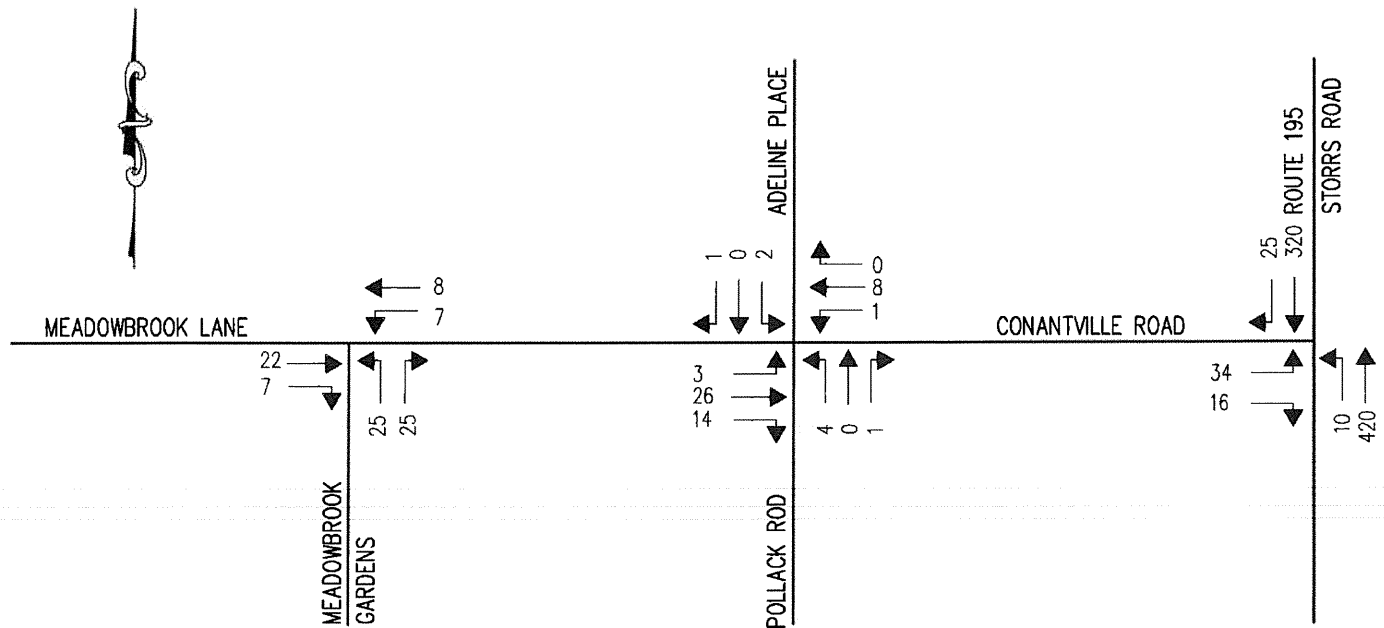


FIGURE 5

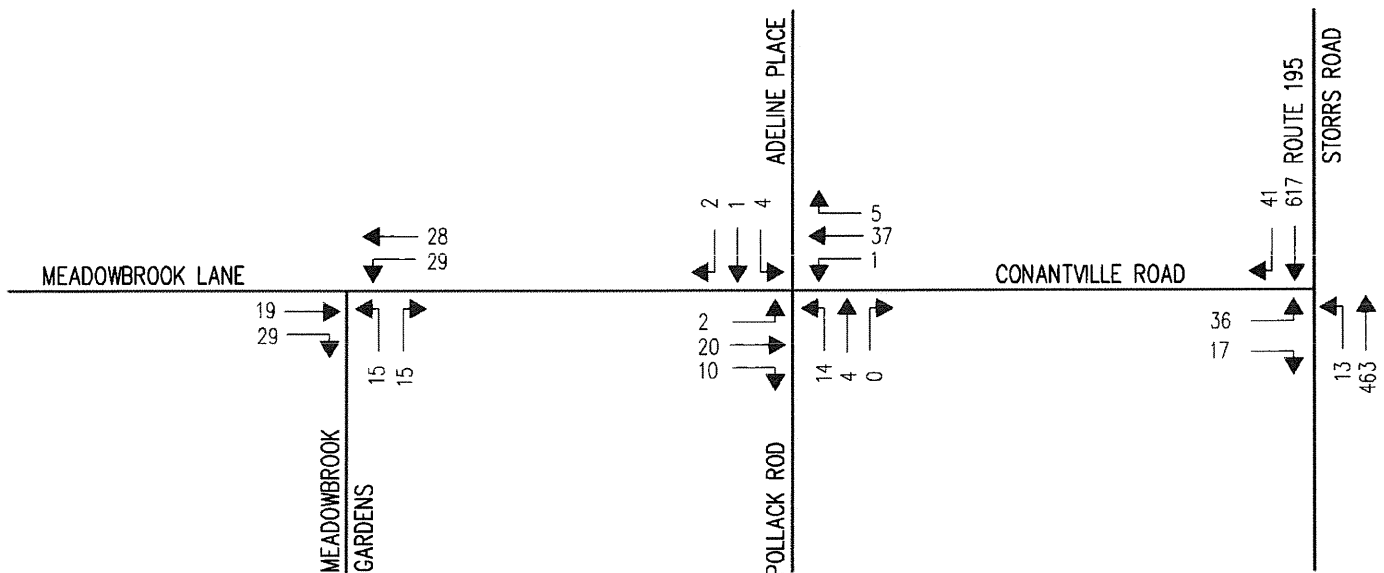
8/14/15

|                                                                                                                                                          |                                                                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>SITE GENERATED TRAFFIC<br/>82 UNITS<br/>A.M. &amp; P.M. PEAK HOURS<br/><b>MEADOWBROOK GARDENS</b><br/>MEADOWBROOK LANE<br/>MANSFIELD, CONNECTICUT</p> | <p><b>F. A. Hesketh &amp; Associates, Inc.</b><br/>8 CREAMERY BROOK, EAST GRANBY, CT 06028</p> <p><b>FAH</b></p> <p>TRAFFIC<br/>PLANNING<br/>ENGINEERING<br/>DESIGN</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NOT TO SCALE



A.M. PEAK HOUR



P.M. PEAK HOUR

FIGURE 6

8/14/15

|                                                                                                                     |  |                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2017 COMBINED<br>A.M. & P.M. PEAK HOURS<br><b>MEADOWBROOK GARDENS</b><br>MEADOWBROOK LANE<br>MANSFIELD, CONNECTICUT |  | <b>F. A. Hesketh &amp; Associates, Inc.</b><br><small>6 CREAMERY BROOK, EAST GRANBY, CT 06026</small><br><b>FAH</b><br>TRAFFIC<br>PLANNING<br>ENGINEERING<br>DESIGN |
|---------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NOT TO SCALE

**Table 5**  
**Level of Service Summary**  
**Meadowbrook Gardens - Mansfield, CT**

|                                                         | A. M. PEAK HOUR    |       |      |       |                  |       |      |       | P. M. PEAK HOUR    |       |      |       |                  |       |      |       |
|---------------------------------------------------------|--------------------|-------|------|-------|------------------|-------|------|-------|--------------------|-------|------|-------|------------------|-------|------|-------|
|                                                         | Background Traffic |       |      |       | Combined Traffic |       |      |       | Background Traffic |       |      |       | Combined Traffic |       |      |       |
|                                                         | LOS                | delay | v/c  | Queue | LOS              | delay | v/c  | Queue | LOS                | delay | v/c  | Queue | LOS              | delay | v/c  | Queue |
| <b>Route 195 at Conantville Road</b>                    |                    |       |      |       |                  |       |      |       |                    |       |      |       |                  |       |      |       |
| NB                                                      | A                  | 0.3   | 0.01 | 1     | A                | 0.3   | 0.01 | 1     | A                  | 0.3   | 0.01 | 1     | A                | 0.5   | 0.02 | 1     |
| SB                                                      | A                  | 0.0   | 0.22 | 0     | A                | 0.0   | 0.22 | 0     | A                  | 0.0   | 0.41 | 0     | A                | 0.0   | 0.42 | 0     |
| EB                                                      | B                  | 14.4  | 0.08 | 7     | C                | 15.5  | 0.14 | 12    | C                  | 23.2  | 0.19 | 17    | D                | 25.8  | 0.25 | 24    |
| <b>Meadowbrook Lane at Pollack Road / Adeline Place</b> |                    |       |      |       |                  |       |      |       |                    |       |      |       |                  |       |      |       |
| NB                                                      | A                  | 8.6   | 0.00 | 0     | A                | 8.8   | 0.01 | 0     | A                  | 9.0   | 0.01 | 1     | A                | 9.2   | 0.02 | 2     |
| SB                                                      | A                  | 8.6   | 0.00 | 0     | A                | 8.7   | 0.00 | 0     | A                  | 8.8   | 0.01 | 1     | A                | 8.9   | 0.01 | 1     |
| EB                                                      | A                  | 1.2   | 0.00 | 0     | A                | 0.5   | 0.00 | 0     | A                  | 0.9   | 0.00 | 0     | A                | 0.5   | 0.00 | 0     |
| WB                                                      | A                  | 1.8   | 0.00 | 0     | A                | 0.8   | 0.00 | 0     | A                  | 0.3   | 0.00 | 0     | A                | 0.2   | 0.00 | 0     |
| <b>Meadowbrook Lane at Meadowbrook Gardens Driveway</b> |                    |       |      |       |                  |       |      |       |                    |       |      |       |                  |       |      |       |
| NB                                                      |                    |       |      |       | A                | 8.8   | 0.05 | 4     |                    |       |      |       | A                | 9.0   | 0.03 | 3     |
| EB                                                      |                    |       |      |       | A                | 0.0   | 0.02 | 0     |                    |       |      |       | A                | 0.0   | 0.03 | 0     |
| WB                                                      |                    |       |      |       | A                | 3.4   | 0.00 | 0     |                    |       |      |       | A                | 3.8   | 0.02 | 2     |



APPENDIX

# ConnDOT COUNT DATA

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF POLICY AND PLANNING  
PLANNING INVENTORY AND DATA

TRAFFIC RECORDER DATA

| TOWN OF MANSFIELD                       | ROUTE          |     |          |            |            |            |     | DIRECTION E |
|-----------------------------------------|----------------|-----|----------|------------|------------|------------|-----|-------------|
| CONANTVILLE ROAD #1 - NE OF OVERLOOK DR |                |     |          |            |            |            |     |             |
| DAY                                     | SUN            | MON | TUE      | WED        | THU        | FRI        | SAT |             |
| DATE                                    | 0              | 0   | 0        | 10/15/2014 | 10/16/2014 | 10/17/2014 | 0   |             |
| TYPE                                    |                |     |          |            |            |            |     |             |
| HOUR                                    |                |     |          |            |            |            |     |             |
|                                         | 2014 ADT = 400 |     | ACF = NA |            |            |            |     |             |
|                                         | *****          |     |          |            |            |            |     |             |
| 12A                                     | 0              | 0   | 0        | 0          | 1          | 1          | 0   |             |
| 01A                                     | 0              | 0   | 0        | 0          | 0          | 0          | 0   |             |
| 02A                                     | 0              | 0   | 0        | 0          | 0          | 1          | 0   |             |
| 03A                                     | 0              | 0   | 0        | 0          | 1          | 0          | 0   |             |
| 04A                                     | 0              | 0   | 0        | 0          | 1          | 2          | 0   |             |
| 05A                                     | 0              | 0   | 0        | 0          | 5          | 3          | 0   |             |
| 06A                                     | 0              | 0   | 0        | 0          | 10         | 14         | 0   |             |
| 07A                                     | 0              | 0   | 0        | 0          | 24         | 31         | 0   |             |
| 08A                                     | 0              | 0   | 0        | 43         | 32         | 0          | 0   |             |
| 09A                                     | 0              | 0   | 0        | 27         | 25         | 0          | 0   |             |
| 10A                                     | 0              | 0   | 0        | 27         | 28         | 0          | 0   |             |
| 11A                                     | 0              | 0   | 0        | 31         | 36         | 0          | 0   |             |
| 12P                                     | 0              | 0   | 0        | 34         | 35         | 0          | 0   |             |
| 01P                                     | 0              | 0   | 0        | 26         | 33         | 0          | 0   |             |
| 02P                                     | 0              | 0   | 0        | 34         | 31         | 0          | 0   |             |
| 03P                                     | 0              | 0   | 0        | 47         | 37         | 0          | 0   |             |
| 04P                                     | 0              | 0   | 0        | 40         | 39         | 0          | 0   |             |
| 05P                                     | 0              | 0   | 0        | 33         | 34         | 0          | 0   |             |
| 06P                                     | 0              | 0   | 0        | 26         | 27         | 0          | 0   |             |
| 07P                                     | 0              | 0   | 0        | 17         | 16         | 0          | 0   |             |
| 08P                                     | 0              | 0   | 0        | 8          | 12         | 0          | 0   |             |
| 09P                                     | 0              | 0   | 0        | 6          | 10         | 0          | 0   |             |
| 10P                                     | 0              | 0   | 0        | 9          | 6          | 0          | 0   |             |
| 11P                                     | 0              | 0   | 0        | 1          | 1          | 0          | 0   |             |
| TOT                                     | 0              | 0   | 0        | 409        | 444        | 52         | 0   |             |

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF POLICY AND PLANNING  
PLANNING INVENTORY AND DATA

## TRAFFIC RECORDER DATA

TOWN OF MANSFIELD

ROUTE

DIRECTION W

CONANTVILLE ROAD #1 - NE OF OVERLOOK DR

| DAY  | SUN | MON | TUE | WED        | THU        | FRI        | SAT |
|------|-----|-----|-----|------------|------------|------------|-----|
| DATE | 0   | 0   | 0   | 10/15/2014 | 10/16/2014 | 10/17/2014 | 0   |
| TYPE |     |     |     |            |            |            |     |
| HOUR |     |     |     |            |            |            |     |

2014 ADT = 400

ACF = NA

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|     |   |   |   |     |     |    |   |
|-----|---|---|---|-----|-----|----|---|
| 12A | 0 | 0 | 0 | 0   | 3   | 4  | 0 |
| 01A | 0 | 0 | 0 | 0   | 1   | 2  | 0 |
| 02A | 0 | 0 | 0 | 0   | 2   | 2  | 0 |
| 03A | 0 | 0 | 0 | 0   | 1   | 1  | 0 |
| 04A | 0 | 0 | 0 | 0   | 1   | 1  | 0 |
| 05A | 0 | 0 | 0 | 0   | 0   | 1  | 0 |
| 06A | 0 | 0 | 0 | 0   | 6   | 9  | 0 |
| 07A | 0 | 0 | 0 | 0   | 31  | 33 | 0 |
| 08A | 0 | 0 | 0 | 30  | 40  | 0  | 0 |
| 09A | 0 | 0 | 0 | 32  | 31  | 0  | 0 |
| 10A | 0 | 0 | 0 | 18  | 14  | 0  | 0 |
| 11A | 0 | 0 | 0 | 33  | 30  | 0  | 0 |
| 12P | 0 | 0 | 0 | 34  | 30  | 0  | 0 |
| 01P | 0 | 0 | 0 | 24  | 23  | 0  | 0 |
| 02P | 0 | 0 | 0 | 36  | 32  | 0  | 0 |
| 03P | 0 | 0 | 0 | 38  | 43  | 0  | 0 |
| 04P | 0 | 0 | 0 | 43  | 39  | 0  | 0 |
| 05P | 0 | 0 | 0 | 20  | 23  | 0  | 0 |
| 06P | 0 | 0 | 0 | 33  | 27  | 0  | 0 |
| 07P | 0 | 0 | 0 | 13  | 18  | 0  | 0 |
| 08P | 0 | 0 | 0 | 14  | 13  | 0  | 0 |
| 09P | 0 | 0 | 0 | 6   | 8   | 0  | 0 |
| 10P | 0 | 0 | 0 | 5   | 5   | 0  | 0 |
| 11P | 0 | 0 | 0 | 2   | 2   | 0  | 0 |
| TOT | 0 | 0 | 0 | 381 | 423 | 53 | 0 |

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF POLICY AND PLANNING  
PLANNING INVENTORY AND DATA

## TRAFFIC RECORDER DATA

TOWN OF MANSFIELD

ROUTE

DIRECTION B

CONANTVILLE RD #1 - NORTH OF POLLACK RD

| DAY  | SUN | MON        | TUE        | WED | THU | FRI | SAT |
|------|-----|------------|------------|-----|-----|-----|-----|
| DATE | 0   | 10/03/2011 | 10/04/2011 | 0   | 0   | 0   | 0   |
| TYPE |     |            |            |     |     |     |     |
| HOUR |     |            |            |     |     |     |     |

2011 ADT = 550

ACF = NA

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|     |   |     |    |   |   |   |   |
|-----|---|-----|----|---|---|---|---|
| 12A | 0 | 0   | 3  | 0 | 0 | 0 | 0 |
| 01A | 0 | 0   | 2  | 0 | 0 | 0 | 0 |
| 02A | 0 | 0   | 0  | 0 | 0 | 0 | 0 |
| 03A | 0 | 0   | 1  | 0 | 0 | 0 | 0 |
| 04A | 0 | 0   | 2  | 0 | 0 | 0 | 0 |
| 05A | 0 | 0   | 2  | 0 | 0 | 0 | 0 |
| 06A | 0 | 0   | 15 | 0 | 0 | 0 | 0 |
| 07A | 0 | 31  | 0  | 0 | 0 | 0 | 0 |
| 08A | 0 | 52  | 0  | 0 | 0 | 0 | 0 |
| 09A | 0 | 39  | 0  | 0 | 0 | 0 | 0 |
| 10A | 0 | 30  | 0  | 0 | 0 | 0 | 0 |
| 11A | 0 | 34  | 0  | 0 | 0 | 0 | 0 |
| 12P | 0 | 43  | 0  | 0 | 0 | 0 | 0 |
| 01P | 0 | 44  | 0  | 0 | 0 | 0 | 0 |
| 02P | 0 | 36  | 0  | 0 | 0 | 0 | 0 |
| 03P | 0 | 63  | 0  | 0 | 0 | 0 | 0 |
| 04P | 0 | 52  | 0  | 0 | 0 | 0 | 0 |
| 05P | 0 | 59  | 0  | 0 | 0 | 0 | 0 |
| 06P | 0 | 27  | 0  | 0 | 0 | 0 | 0 |
| 07P | 0 | 29  | 0  | 0 | 0 | 0 | 0 |
| 08P | 0 | 17  | 0  | 0 | 0 | 0 | 0 |
| 09P | 0 | 7   | 0  | 0 | 0 | 0 | 0 |
| 10P | 0 | 6   | 0  | 0 | 0 | 0 | 0 |
| 11P | 0 | 5   | 0  | 0 | 0 | 0 | 0 |
| TOT | 0 | 574 | 25 | 0 | 0 | 0 | 0 |

**F.A. HESKETH**  
**AUTOMATED COUNT DATA**

# F. A. Hesketh & Associates, Inc.

Meadowbrook Road  
west of Pollock Road  
Mansfield, CT  
Job No. 15131

6 Creamery Brook  
East Granby, CT 06026  
Phone: (860) 653-8000

Date Start: 25-Jun-15  
Date End: 01-Jul-15  
Site Code: 11140001

| Start Time | 22-Jun-15<br>Mon | 23-Jun-15<br>Tue | 24-Jun-15<br>Wed | 25-Jun-15<br>Thu | 26-Jun-15<br>Fri | Weekday<br>Average | 27-Jun-15<br>Sat | 28-Jun-15<br>Sun |
|------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
| 12:00 AM   | *                | *                | *                | *                | 2                | 2                  | 2                | 2                |
| 01:00      | *                | *                | *                | *                | 0                | 0                  | 4                | 1                |
| 02:00      | *                | *                | *                | *                | 0                | 0                  | 1                | 2                |
| 03:00      | *                | *                | *                | *                | 1                | 1                  | 3                | 1                |
| 04:00      | *                | *                | *                | *                | 0                | 0                  | 1                | 2                |
| 05:00      | *                | *                | *                | *                | 3                | 3                  | 3                | 4                |
| 06:00      | *                | *                | *                | *                | 7                | 7                  | 1                | 1                |
| 07:00      | *                | *                | *                | *                | 17               | 17                 | 7                | 2                |
| 08:00      | *                | *                | *                | *                | 22               | 22                 | 12               | 9                |
| 09:00      | *                | *                | *                | *                | 29               | 29                 | 24               | 12               |
| 10:00      | *                | *                | *                | 27               | 28               | 28                 | 28               | 19               |
| 11:00      | *                | *                | *                | 35               | 35               | 35                 | 33               | 19               |
| 12:00 PM   | *                | *                | *                | 40               | 36               | 38                 | 21               | 33               |
| 01:00      | *                | *                | *                | 24               | 33               | 28                 | 29               | 20               |
| 02:00      | *                | *                | *                | 41               | 27               | 34                 | 36               | 24               |
| 03:00      | *                | *                | *                | 36               | 31               | 34                 | 17               | 21               |
| 04:00      | *                | *                | *                | 36               | 40               | 38                 | 21               | 27               |
| 05:00      | *                | *                | *                | 40               | 35               | 38                 | 26               | 19               |
| 06:00      | *                | *                | *                | 34               | 37               | 36                 | 15               | 15               |
| 07:00      | *                | *                | *                | 28               | 36               | 32                 | 11               | 18               |
| 08:00      | *                | *                | *                | 13               | 20               | 16                 | 16               | 11               |
| 09:00      | *                | *                | *                | 8                | 12               | 10                 | 12               | 4                |
| 10:00      | *                | *                | *                | 9                | 10               | 10                 | 5                | 3                |
| 11:00      | *                | *                | *                | 2                | 4                | 3                  | 2                | 3                |
| Total      | 0                | 0                | 0                | 373              | 465              |                    | 330              | 272              |
| Percentage | 0.0%             | 0.0%             | 0.0%             | 80.9%            | 100.9%           |                    | 71.6%            | 59.0%            |
| AM Peak    | -                | -                | -                | 11:00            | 11:00            | -                  | 11:00            | 10:00            |
| Vol.       | -                | -                | -                | 35               | 35               | -                  | 33               | 19               |
| PM Peak    | -                | -                | -                | 14:00            | 16:00            | -                  | 14:00            | 12:00            |
| Vol.       | -                | -                | -                | 41               | 40               | -                  | 36               | 33               |

# F. A. Hesketh & Associates, Inc.

Meadowbrook Road  
west of Pollock Road  
Mansfield, CT  
Job No. 15131

6 Creamery Brook  
East Granby, CT 06026  
Phone: (860) 653-8000

Date Start: 25-Jun-15  
Date End: 01-Jul-15  
Site Code: 11140001

| Start Time | 29-Jun-15<br>Mon | 30-Jun-15<br>Tue | 01-Jul-15<br>Wed | 02-Jul-15<br>Thu | 03-Jul-15<br>Fri | Weekday<br>Average | 04-Jul-15<br>Sat | 05-Jul-15<br>Sun |
|------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------|------------------|
| 12:00 AM   | 0                | 0                | 1                | *                | *                | 0                  | *                | *                |
| 01:00      | 3                | 3                | 1                | *                | *                | 2                  | *                | *                |
| 02:00      | 0                | 0                | 0                | *                | *                | 0                  | *                | *                |
| 03:00      | 1                | 2                | 1                | *                | *                | 1                  | *                | *                |
| 04:00      | 1                | 0                | 0                | *                | *                | 0                  | *                | *                |
| 05:00      | 3                | 1                | 4                | *                | *                | 3                  | *                | *                |
| 06:00      | 8                | 13               | 10               | *                | *                | 10                 | *                | *                |
| 07:00      | 13               | 22               | 19               | *                | *                | 18                 | *                | *                |
| 08:00      | 22               | 23               | 20               | *                | *                | 22                 | *                | *                |
| 09:00      | 15               | 21               | 20               | *                | *                | 19                 | *                | *                |
| 10:00      | 39               | 39               | 17               | *                | *                | 32                 | *                | *                |
| 11:00      | 19               | 27               | 30               | *                | *                | 25                 | *                | *                |
| 12:00 PM   | 39               | 32               | 43               | *                | *                | 38                 | *                | *                |
| 01:00      | 33               | 39               | 38               | *                | *                | 37                 | *                | *                |
| 02:00      | 23               | 28               | 34               | *                | *                | 28                 | *                | *                |
| 03:00      | 31               | 41               | 36               | *                | *                | 36                 | *                | *                |
| 04:00      | 36               | 45               | 41               | *                | *                | 41                 | *                | *                |
| 05:00      | 28               | 33               | 36               | *                | *                | 32                 | *                | *                |
| 06:00      | 20               | 31               | *                | *                | *                | 26                 | *                | *                |
| 07:00      | 22               | 29               | *                | *                | *                | 26                 | *                | *                |
| 08:00      | 24               | 22               | *                | *                | *                | 23                 | *                | *                |
| 09:00      | 18               | 13               | *                | *                | *                | 16                 | *                | *                |
| 10:00      | 9                | 7                | *                | *                | *                | 8                  | *                | *                |
| 11:00      | 1                | 5                | *                | *                | *                | 3                  | *                | *                |
| Total      | 408              | 476              | 351              | 0                | 0                |                    | 0                | 0                |
| Percentage | 91.5%            | 106.7%           | 78.7%            | 0.0%             | 0.0%             |                    | 0.0%             | 0.0%             |
| AM Peak    | 10:00            | 10:00            | 11:00            | -                | -                | -                  | -                | -                |
| Vol.       | 39               | 39               | 30               | -                | -                | -                  | -                | -                |
| PM Peak    | 12:00            | 16:00            | 12:00            | -                | -                | -                  | -                | -                |
| Vol.       | 39               | 45               | 43               | -                | -                | -                  | -                | -                |
| Total      |                  | 476              | 351              |                  |                  |                    |                  |                  |



**F.A. HESKETH**  
**TURNING MOVEMENT COUNTS**

F.A. Hesketh & Associates, Inc.

6 Creamery Brook

East Granby, CT 06026

Phone: (860) 653-8000 Fax: (860) 844-860

Meadowbrook Lane at  
Pollack Road  
Mansfield, CT  
NO. 15131

File Name : Pollack AM1

Site Code : 15131100

Start Date : 6/25/2015

Page No : 1

Groups Printed- Unshifted

|             | Pollack Road<br>From North |      |      |              | Meadowbrook Lane<br>From East |      |      |               | Pollack Road<br>From South |      |      |               | Meadowbrook Lane<br>From West |      |      |               | Int<br>Total |
|-------------|----------------------------|------|------|--------------|-------------------------------|------|------|---------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|--------------|
| Start Time  | Right                      | Thru | Left | App<br>Total | Right                         | Thru | Left | App.<br>Total | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total |              |
| Factor      | 1.0                        | 1.0  | 1.0  |              | 1.0                           | 1.0  | 1.0  |               | 1.0                        | 1.0  | 1.0  |               | 1.0                           | 1.0  | 1.0  |               |              |
| 07:00 AM    | 0                          | 0    | 0    | 0            | 0                             | 2    | 0    | 2             | 0                          | 0    | 0    | 0             | 0                             | 1    | 1    | 2             | 4            |
| 07:15 AM    | 0                          | 0    | 0    | 0            | 0                             | 1    | 0    | 1             | 0                          | 0    | 0    | 0             | 1                             | 0    | 0    | 1             | 2            |
| 07:30 AM    | 1                          | 0    | 0    | 1            | 0                             | 4    | 0    | 4             | 0                          | 0    | 1    | 1             | 1                             | 1    | 0    | 2             | 8            |
| 07:45 AM    | 1                          | 0    | 0    | 1            | 0                             | 1    | 0    | 1             | 0                          | 0    | 0    | 0             | 0                             | 4    | 0    | 4             | 6            |
| Total       | 2                          | 0    | 0    | 2            | 0                             | 8    | 0    | 8             | 0                          | 0    | 1    | 1             | 2                             | 6    | 1    | 9             | 20           |
| 08:00 AM    | 1                          | 0    | 0    | 1            | 0                             | 2    | 0    | 2             | 1                          | 0    | 1    | 2             | 0                             | 1    | 2    | 3             | 8            |
| 08:15 AM    | 0                          | 0    | 0    | 0            | 0                             | 0    | 1    | 1             | 0                          | 0    | 0    | 0             | 2                             | 1    | 1    | 4             | 5            |
| 08:30 AM    | 0                          | 0    | 2    | 2            | 0                             | 0    | 0    | 0             | 0                          | 0    | 0    | 0             | 2                             | 3    | 0    | 5             | 7            |
| 08:45 AM    | 0                          | 0    | 0    | 0            | 0                             | 1    | 0    | 1             | 0                          | 0    | 1    | 1             | 4                             | 2    | 0    | 6             | 8            |
| Total       | 1                          | 0    | 2    | 3            | 0                             | 3    | 1    | 4             | 1                          | 0    | 2    | 3             | 8                             | 7    | 3    | 18            | 28           |
| Grand Total | 3                          | 0    | 2    | 5            | 0                             | 11   | 1    | 12            | 1                          | 0    | 3    | 4             | 10                            | 13   | 4    | 27            | 48           |
| Apprch %    | 60.0                       | 0.0  | 40.0 |              | 0.0                           | 91.7 | 8.3  |               | 25.0                       | 0.0  | 75.0 |               | 37.0                          | 48.1 | 14.8 |               |              |
| Total %     | 6.3                        | 0.0  | 4.2  | 10.4         | 0.0                           | 22.9 | 2.1  | 25.0          | 2.1                        | 0.0  | 6.3  | 8.3           | 20.8                          | 27.1 | 8.3  | 56.3          |              |

|                                                   | Pollack Road<br>From North |      |      |               | Meadowbrook Lane<br>From East |       |      |               | Pollack Road<br>From South |      |      |               | Meadowbrook Lane<br>From West |      |      |               |               |
|---------------------------------------------------|----------------------------|------|------|---------------|-------------------------------|-------|------|---------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|---------------|
| Start Time                                        | Right                      | Thru | Left | App.<br>Total | Right                         | Thru  | Left | App.<br>Total | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total | Int.<br>Total |
| Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1 |                            |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               |               |
| Intersection                                      | 08:00 AM                   |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               |               |
| Volume                                            | 1                          | 0    | 2    | 3             | 0                             | 3     | 1    | 4             | 1                          | 0    | 2    | 3             | 8                             | 7    | 3    | 18            | 28            |
| Percent                                           | 33.3                       | 0.0  | 66.7 |               | 0.0                           | 75.0  | 25.0 |               | 33.3                       | 0.0  | 66.7 |               | 44.4                          | 38.9 | 16.7 |               |               |
| 08:45                                             |                            |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               |               |
| Volume                                            | 0                          | 0    | 0    | 0             | 0                             | 1     | 0    | 1             | 0                          | 0    | 1    | 1             | 4                             | 2    | 0    | 6             | 8             |
| Peak Factor                                       |                            |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               | 0.875         |
| High Int.                                         | 08:30 AM                   |      |      |               | 08:00 AM                      |       |      |               | 08:00 AM                   |      |      |               | 08:45 AM                      |      |      |               |               |
| Volume                                            | 0                          | 0    | 2    | 2             | 0                             | 2     | 0    | 2             | 1                          | 0    | 1    | 2             | 4                             | 2    | 0    | 6             |               |
| Peak Factor                                       | 0.375                      |      |      |               | 0.500                         |       |      |               | 0.375                      |      |      |               | 0.750                         |      |      |               |               |
| Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1 |                            |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               |               |
| By                                                | 07:45 AM                   |      |      |               | 07:00 AM                      |       |      |               | 07:15 AM                   |      |      |               | 08:00 AM                      |      |      |               |               |
| Approach                                          |                            |      |      |               |                               |       |      |               |                            |      |      |               |                               |      |      |               |               |
| Volume                                            | 2                          | 0    | 2    | 4             | 0                             | 8     | 0    | 8             | 1                          | 0    | 2    | 3             | 8                             | 7    | 3    | 18            |               |
| Percent                                           | 50.0                       | 0.0  | 50.0 |               | 0.0                           | 100.0 | 0.0  |               | 33.3                       | 0.0  | 66.7 |               | 44.4                          | 38.9 | 16.7 |               |               |
| High Int.                                         | 08:30 AM                   |      |      |               | 07:30 AM                      |       |      |               | 08:00 AM                   |      |      |               | 08:45 AM                      |      |      |               |               |
| Volume                                            | 0                          | 0    | 2    | 2             | 0                             | 4     | 0    | 4             | 1                          | 0    | 1    | 2             | 4                             | 2    | 0    | 6             |               |
| Peak Factor                                       | 0.500                      |      |      |               | 0.500                         |       |      |               | 0.375                      |      |      |               | 0.750                         |      |      |               |               |

F.A. Hesketh & Associates, Inc.

6 Creamery Brook

East Granby, CT 06026

Phone: (860) 653-8000 Fax: (860) 844-860

Route 195 at  
Meadowbrook Lane  
Mansfield, CT  
Job No. 15131

File Name : Rt195 AM

Site Code : 15131200

Start Date : 6/30/2015

Page No : 1

Groups Printed- Unshifted

| Start Time  | Route 195<br>From North |      |            | Route 195<br>From South |      |            | Meadowbrook Lane<br>From West |      |            | Int. Total |
|-------------|-------------------------|------|------------|-------------------------|------|------------|-------------------------------|------|------------|------------|
|             | Right                   | Thru | App. Total | Thru                    | Left | App. Total | Right                         | Left | App. Total |            |
| Factor      | 1.0                     | 1.0  |            | 1.0                     | 1.0  |            | 1.0                           | 1.0  |            |            |
| 07:00 AM    | 2                       | 48   | 50         | 51                      | 2    | 53         | 1                             | 1    | 2          | 105        |
| 07:15 AM    | 4                       | 47   | 51         | 63                      | 1    | 64         | 1                             | 2    | 3          | 118        |
| 07:30 AM    | 2                       | 55   | 57         | 85                      | 2    | 87         | 0                             | 5    | 5          | 149        |
| 07:45 AM    | 7                       | 77   | 84         | 101                     | 1    | 102        | 0                             | 4    | 4          | 190        |
| Total       | 15                      | 227  | 242        | 300                     | 6    | 306        | 2                             | 12   | 14         | 562        |
| 08:00 AM    | 5                       | 65   | 70         | 104                     | 4    | 108        | 1                             | 4    | 5          | 183        |
| 08:15 AM    | 6                       | 72   | 78         | 105                     | 2    | 107        | 2                             | 3    | 5          | 190        |
| 08:30 AM    | 3                       | 99   | 102        | 95                      | 0    | 95         | 4                             | 4    | 8          | 205        |
| 08:45 AM    | 6                       | 72   | 78         | 100                     | 3    | 103        | 4                             | 7    | 11         | 192        |
| Total       | 20                      | 308  | 328        | 404                     | 9    | 413        | 11                            | 18   | 29         | 770        |
| Grand Total | 35                      | 535  | 570        | 704                     | 15   | 719        | 13                            | 30   | 43         | 1332       |
| Apprch %    | 6.1                     | 93.9 |            | 97.9                    | 2.1  |            | 30.2                          | 69.8 |            |            |
| Total %     | 2.6                     | 40.2 | 42.8       | 52.9                    | 1.1  | 54.0       | 1.0                           | 2.3  | 3.2        |            |

|                                                   | Route 195<br>From North |      |            | Route 195<br>From South |      |            | Meadowbrook Lane<br>From West |      |            |            |
|---------------------------------------------------|-------------------------|------|------------|-------------------------|------|------------|-------------------------------|------|------------|------------|
| Start Time                                        | Right                   | Thru | App. Total | Thru                    | Left | App. Total | Right                         | Left | App. Total | Int. Total |
| Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1 |                         |      |            |                         |      |            |                               |      |            |            |
| Intersection                                      | 08:00 AM                |      |            |                         |      |            |                               |      |            |            |
| Volume                                            | 20                      | 308  | 328        | 404                     | 9    | 413        | 11                            | 18   | 29         | 770        |
| Percent                                           | 6.1                     | 93.9 |            | 97.8                    | 2.2  |            | 37.9                          | 62.1 |            |            |
| 08:30 Volume                                      | 3                       | 99   | 102        | 95                      | 0    | 95         | 4                             | 4    | 8          | 205        |
| Peak Factor                                       |                         |      |            |                         |      |            |                               |      |            | 0.939      |
| High Int.                                         | 08:30 AM                |      |            | 08:00 AM                |      |            | 08:45 AM                      |      |            |            |
| Volume                                            | 3                       | 99   | 102        | 104                     | 4    | 108        | 4                             | 7    | 11         |            |
| Peak Factor                                       |                         |      | 0.804      |                         |      | 0.956      |                               |      | 0.659      |            |
| Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1 |                         |      |            |                         |      |            |                               |      |            |            |
| By Approach                                       | 07:45 AM                |      |            | 08:00 AM                |      |            | 08:00 AM                      |      |            |            |
| Volume                                            | 21                      | 313  | 334        | 404                     | 9    | 413        | 11                            | 18   | 29         |            |
| Percent                                           | 6.3                     | 93.7 |            | 97.8                    | 2.2  |            | 37.9                          | 62.1 |            |            |
| High Int.                                         | 08:30 AM                |      |            | 08:00 AM                |      |            | 08:45 AM                      |      |            |            |
| Volume                                            | 3                       | 99   | 102        | 104                     | 4    | 108        | 4                             | 7    | 11         |            |
| Peak Factor                                       |                         |      | 0.819      |                         |      | 0.956      |                               |      | 0.659      |            |

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Meadowbrook Lane at  
Pollock Road  
Mansfield, CT  
Job No. 15131

File Name : Pollock PM

Site Code : 22222222

Start Date : 7/1/2015

Page No : 1

Groups Printed- Unshifted

|             | Pollock Road<br>From North |      |      |               | Meadowbrook Lane<br>From East |      |      |               | Pollock Road<br>From South |      |      |               | Meadowbrook Lane<br>From West |      |      |               | Int.<br>Total |
|-------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|---------------|
| Start Time  | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total |               |
| Factor      | 1.0                        | 1.0  | 1.0  |               | 1.0                           | 1.0  | 1.0  |               | 1.0                        | 1.0  | 1.0  |               | 1.0                           | 1.0  | 1.0  |               |               |
| 04:00 PM    | 0                          | 0    | 1    | 1             | 0                             | 8    | 0    | 8             | 0                          | 0    | 2    | 2             | 0                             | 1    | 1    | 2             | 13            |
| 04:15 PM    | 1                          | 0    | 0    | 1             | 1                             | 3    | 0    | 4             | 0                          | 1    | 1    | 2             | 0                             | 4    | 1    | 5             | 12            |
| 04:30 PM    | 0                          | 0    | 1    | 1             | 0                             | 2    | 0    | 2             | 0                          | 0    | 1    | 1             | 2                             | 4    | 0    | 6             | 10            |
| 04:45 PM    | 1                          | 1    | 1    | 3             | 0                             | 5    | 1    | 6             | 0                          | 0    | 2    | 2             | 3                             | 2    | 1    | 6             | 17            |
| Total       | 2                          | 1    | 3    | 6             | 1                             | 18   | 1    | 20            | 0                          | 1    | 6    | 7             | 5                             | 11   | 3    | 19            | 52            |
| 05:00 PM    | 0                          | 0    | 1    | 1             | 3                             | 3    | 0    | 6             | 0                          | 2    | 0    | 2             | 0                             | 2    | 1    | 3             | 12            |
| 05:15 PM    | 1                          | 0    | 1    | 2             | 2                             | 4    | 0    | 6             | 0                          | 0    | 1    | 1             | 2                             | 2    | 0    | 4             | 13            |
| 05:30 PM    | 0                          | 0    | 1    | 1             | 0                             | 3    | 0    | 3             | 0                          | 2    | 3    | 5             | 1                             | 2    | 0    | 3             | 12            |
| 05:45 PM    | 0                          | 0    | 1    | 1             | 0                             | 4    | 0    | 4             | 0                          | 0    | 2    | 2             | 1                             | 5    | 2    | 8             | 15            |
| Total       | 1                          | 0    | 4    | 5             | 5                             | 14   | 0    | 19            | 0                          | 4    | 6    | 10            | 4                             | 11   | 3    | 18            | 52            |
| Grand Total | 3                          | 1    | 7    | 11            | 6                             | 32   | 1    | 39            | 0                          | 5    | 12   | 17            | 9                             | 22   | 6    | 37            | 104           |
| Apprch %    | 27.3                       | 9.1  | 63.6 |               | 15.4                          | 82.1 | 2.6  |               | 0.0                        | 29.4 | 70.6 |               | 24.3                          | 59.5 | 16.2 |               |               |
| Total %     | 2.9                        | 1.0  | 6.7  | 10.6          | 5.8                           | 30.8 | 1.0  | 37.5          | 0.0                        | 4.8  | 11.5 | 16.3          | 8.7                           | 21.2 | 5.8  | 35.6          |               |

|                                                   | Pollock Road<br>From North |      |      |               | Meadowbrook Lane<br>From East |      |      |               | Pollock Road<br>From South |      |      |               | Meadowbrook Lane<br>From West |      |      |               |               |
|---------------------------------------------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|----------------------------|------|------|---------------|-------------------------------|------|------|---------------|---------------|
| Start Time                                        | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total | Right                      | Thru | Left | App.<br>Total | Right                         | Thru | Left | App.<br>Total | Int.<br>Total |
| Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               |               |
| Intersection                                      | 04:45 PM                   |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               |               |
| Volume                                            | 2                          | 1    | 4    | 7             | 5                             | 15   | 1    | 21            | 0                          | 4    | 6    | 10            | 6                             | 8    | 2    | 16            | 54            |
| Percent                                           | 28.6                       | 14.3 | 57.1 |               | 23.8                          | 71.4 | 4.8  |               | 0.0                        | 40.0 | 60.0 |               | 37.5                          | 50.0 | 12.5 |               |               |
| 04:45                                             | 1                          | 1    | 1    | 3             | 0                             | 5    | 1    | 6             | 0                          | 0    | 2    | 2             | 3                             | 2    | 1    | 6             | 17            |
| Volume                                            |                            |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               |               |
| Peak Factor                                       |                            |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               | 0.794         |
| High Int.                                         | 04:45 PM                   |      |      |               | 04:45 PM                      |      |      |               | 05:30 PM                   |      |      |               | 04:45 PM                      |      |      |               |               |
| Volume                                            | 1                          | 1    | 1    | 3             | 0                             | 5    | 1    | 6             | 0                          | 2    | 3    | 5             | 3                             | 2    | 1    | 6             |               |
| Peak Factor                                       | 0.583                      |      |      |               | 0.875                         |      |      |               | 0.500                      |      |      |               | 0.667                         |      |      |               |               |
| Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 |                            |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               |               |
| By                                                | 04:30 PM                   |      |      |               | 04:45 PM                      |      |      |               | 04:45 PM                   |      |      |               | 04:15 PM                      |      |      |               |               |
| Approach                                          |                            |      |      |               |                               |      |      |               |                            |      |      |               |                               |      |      |               |               |
| Volume                                            | 2                          | 1    | 4    | 7             | 5                             | 15   | 1    | 21            | 0                          | 4    | 6    | 10            | 5                             | 12   | 3    | 20            |               |
| Percent                                           | 28.6                       | 14.3 | 57.1 |               | 23.8                          | 71.4 | 4.8  |               | 0.0                        | 40.0 | 60.0 |               | 25.0                          | 60.0 | 15.0 |               |               |
| High Int.                                         | 04:45 PM                   |      |      |               | 04:45 PM                      |      |      |               | 05:30 PM                   |      |      |               | 04:30 PM                      |      |      |               |               |
| Volume                                            | 1                          | 1    | 1    | 3             | 0                             | 5    | 1    | 6             | 0                          | 2    | 3    | 5             | 2                             | 4    | 0    | 6             |               |
| Peak Factor                                       | 0.583                      |      |      |               | 0.875                         |      |      |               | 0.500                      |      |      |               | 0.833                         |      |      |               |               |

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Route 195 at  
Conantville Road  
Mansfield, CT  
Job No. 15131

File Name : Rt195 PM

Site Code : 11111111

Start Date : 7/1/2015

Page No : 1

Groups Printed- Unshifted

| Start Time<br>Factor | Route 195<br>From North |      |            | Route 195<br>From South |      |            | Conantville Road<br>From West |      |            | Int. Total |
|----------------------|-------------------------|------|------------|-------------------------|------|------------|-------------------------------|------|------------|------------|
|                      | Right                   | Thru | App. Total | Thru                    | Left | App. Total | Right                         | Left | App. Total |            |
|                      | 1.0                     | 1.0  |            | 1.0                     | 1.0  |            | 1.0                           | 1.0  |            |            |
| 04:00 PM             | 8                       | 113  | 121        | 101                     | 3    | 104        | 5                             | 3    | 8          | 233        |
| 04:15 PM             | 5                       | 150  | 155        | 100                     | 3    | 103        | 6                             | 6    | 12         | 270        |
| 04:30 PM             | 1                       | 139  | 140        | 125                     | 1    | 126        | 3                             | 8    | 11         | 277        |
| 04:45 PM             | 8                       | 172  | 180        | 113                     | 5    | 118        | 4                             | 3    | 7          | 305        |
| Total                | 22                      | 574  | 596        | 439                     | 12   | 451        | 18                            | 20   | 38         | 1085       |
| 05:00 PM             | 9                       | 132  | 141        | 107                     | 0    | 107        | 1                             | 9    | 10         | 258        |
| 05:15 PM             | 4                       | 123  | 127        | 108                     | 2    | 110        | 7                             | 2    | 9          | 246        |
| 05:30 PM             | 3                       | 122  | 125        | 107                     | 0    | 107        | 6                             | 1    | 7          | 239        |
| 05:45 PM             | 3                       | 97   | 100        | 87                      | 5    | 92         | 5                             | 4    | 9          | 201        |
| Total                | 19                      | 474  | 493        | 409                     | 7    | 416        | 19                            | 16   | 35         | 944        |
| Grand Total          | 41                      | 1048 | 1089       | 848                     | 19   | 867        | 37                            | 36   | 73         | 2029       |
| Apprch %             | 3.8                     | 96.2 |            | 97.8                    | 2.2  |            | 50.7                          | 49.3 |            |            |
| Total %              | 2.0                     | 51.7 | 53.7       | 41.8                    | 0.9  | 42.7       | 1.8                           | 1.8  | 3.6        |            |

| Start Time                                        | Route 195<br>From North |      |            | Route 195<br>From South |      |            | Conantville Road<br>From West |      |            | Int. Total |
|---------------------------------------------------|-------------------------|------|------------|-------------------------|------|------------|-------------------------------|------|------------|------------|
|                                                   | Right                   | Thru | App. Total | Thru                    | Left | App. Total | Right                         | Left | App. Total |            |
| Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 |                         |      |            |                         |      |            |                               |      |            |            |
| Intersection 04:15 PM                             |                         |      |            |                         |      |            |                               |      |            |            |
| Volume                                            | 23                      | 593  | 616        | 445                     | 9    | 454        | 14                            | 26   | 40         | 1110       |
| Percent                                           | 3.7                     | 96.3 |            | 98.0                    | 2.0  |            | 35.0                          | 65.0 |            |            |
| 04:45 Volume                                      | 8                       | 172  | 180        | 113                     | 5    | 118        | 4                             | 3    | 7          | 305        |
| Peak Factor                                       |                         |      |            |                         |      |            |                               |      |            | 0.910      |
| High Int. 04:45 PM                                |                         |      |            | 04:30 PM                |      |            | 04:15 PM                      |      |            |            |
| Volume                                            | 8                       | 172  | 180        | 125                     | 1    | 126        | 6                             | 6    | 12         |            |
| Peak Factor                                       |                         |      | 0.856      |                         |      | 0.901      |                               |      | 0.833      |            |
| Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1 |                         |      |            |                         |      |            |                               |      |            |            |
| By Approach 04:15 PM                              |                         |      |            | 04:30 PM                |      |            | 04:15 PM                      |      |            |            |
| Volume                                            | 23                      | 593  | 616        | 453                     | 8    | 461        | 14                            | 26   | 40         |            |
| Percent                                           | 3.7                     | 96.3 |            | 98.3                    | 1.7  |            | 35.0                          | 65.0 |            |            |
| High Int. 04:45 PM                                |                         |      |            | 04:30 PM                |      |            | 04:15 PM                      |      |            |            |
| Volume                                            | 8                       | 172  | 180        | 125                     | 1    | 126        | 6                             | 6    | 12         |            |
| Peak Factor                                       |                         |      | 0.856      |                         |      | 0.915      |                               |      | 0.833      |            |

**ITE TRIP GENERATION  
WORKSHEETS**

Average Rate Trip Calculations  
For 50 Dwelling Units of Apartments(220) - [E]

Project: Meadowbrook Gardens  
Phase:

Open Date:  
Analysis Date:

Description:

|                           | Average<br>Rate | Standard<br>Deviation | Adjustment<br>Factor | Driveway<br>Volume |
|---------------------------|-----------------|-----------------------|----------------------|--------------------|
| Avg. Weekday 2-Way Volume | 8.53            | 0.00                  | 1.00                 | 427                |
| 7-9 AM Peak Hour Enter    | 0.11            | 0.00                  | 1.00                 | 6                  |
| 7-9 AM Peak Hour Exit     | 0.45            | 0.00                  | 1.00                 | 22                 |
| 7-9 AM Peak Hour Total    | 0.56            | 0.00                  | 1.00                 | 28                 |
| 4-6 PM Peak Hour Enter    | 0.59            | 0.00                  | 1.00                 | 29                 |
| 4-6 PM Peak Hour Exit     | 0.32            | 0.00                  | 1.00                 | 16                 |
| 4-6 PM Peak Hour Total    | 0.90            | 0.00                  | 1.00                 | 45                 |
| Saturday 2-Way Volume     | 2.73            | 0.00                  | 1.00                 | 136                |
| Saturday Peak Hour Enter  | 0.00            | 0.00                  | 1.00                 | 0                  |
| Saturday Peak Hour Exit   | 0.00            | 0.00                  | 1.00                 | 0                  |
| Saturday Peak Hour Total  | 0.79            | 0.00                  | 1.00                 | 40                 |

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $T = 6.06(X) + 123.56, R^2 = 0.87$   
7-9 AM Peak Hr. Total:  $T = .49(X) + 3.73$   
 $R^2 = 0.83, 0.2 \text{ Enter}, 0.8 \text{ Exit}$   
4-6 PM Peak Hr. Total:  $T = .55(X) + 17.65$   
 $R^2 = 0.77, 0.65 \text{ Enter}, 0.35 \text{ Exit}$   
AM Gen Pk Hr. Total:  $T = .54(X) + 2.45$   
 $R^2 = 0.82, 0.29 \text{ Enter}, 0.71 \text{ Exit}$   
PM Gen Pk Hr. Total:  $T = .6(X) + 14.91$   
 $R^2 = 0.8, 0.61 \text{ Enter}, 0.39 \text{ Exit}$   
Sat. 2-Way Volume:  $T = 7.85(X) + -256.19, R^2 = 0.85$   
Sat. Pk Hr. Total:  $T = .41(X) + 19.23$   
 $R^2 = 0.56, 0 \text{ Enter}, 0 \text{ Exit}$   
Sun. 2-Way Volume:  $T = 6.42(X) + -101.12, R^2 = 0.82$   
Sun. Pk Hr. Total:  $0$   
 $R^2 = 0, 0 \text{ Enter}, 0 \text{ Exit}$

Note: A zero indicates no data available.

Source: Institute of Transportation Engineers  
Trip Generation Manual, 9th Edition, 2012

TRIP GENERATION 2013, TRAFFICWARE, LLC

Average Rate Trip Calculations  
For 90 Dwelling Units of Apartments(220) - [E]

Project: Meadowbrook Gardens  
Phase:

Open Date:  
Analysis Date:

Description:

|                           | Average<br>Rate | Standard<br>Deviation | Adjustment<br>Factor | Driveway<br>Volume |
|---------------------------|-----------------|-----------------------|----------------------|--------------------|
| Avg. Weekday 2-Way Volume | 7.43            | 0.00                  | 1.00                 | 669                |
| 7-9 AM Peak Hour Enter    | 0.11            | 0.00                  | 1.00                 | 10                 |
| 7-9 AM Peak Hour Exit     | 0.43            | 0.00                  | 1.00                 | 38                 |
| 7-9 AM Peak Hour Total    | 0.53            | 0.00                  | 1.00                 | 48                 |
| 4-6 PM Peak Hour Enter    | 0.48            | 0.00                  | 1.00                 | 44                 |
| 4-6 PM Peak Hour Exit     | 0.26            | 0.00                  | 1.00                 | 23                 |
| 4-6 PM Peak Hour Total    | 0.75            | 0.00                  | 1.00                 | 67                 |
| Saturday 2-Way Volume     | 5.00            | 0.00                  | 1.00                 | 450                |
| Saturday Peak Hour Enter  | 0.00            | 0.00                  | 1.00                 | 0                  |
| Saturday Peak Hour Exit   | 0.00            | 0.00                  | 1.00                 | 0                  |
| Saturday Peak Hour Total  | 0.62            | 0.00                  | 1.00                 | 56                 |

The above rates were calculated from these equations:

24-Hr. 2-Way Volume:  $T = 6.06(X) + 123.56, R^2 = 0.87$   
7-9 AM Peak Hr. Total:  $T = .49(X) + 3.73$   
 $R^2 = 0.83, 0.2 \text{ Enter}, 0.8 \text{ Exit}$   
4-6 PM Peak Hr. Total:  $T = .55(X) + 17.65$   
 $R^2 = 0.77, 0.65 \text{ Enter}, 0.35 \text{ Exit}$   
AM Gen Pk Hr. Total:  $T = .54(X) + 2.45$   
 $R^2 = 0.82, 0.29 \text{ Enter}, 0.71 \text{ Exit}$   
PM Gen Pk Hr. Total:  $T = .6(X) + 14.91$   
 $R^2 = 0.8, 0.61 \text{ Enter}, 0.39 \text{ Exit}$   
Sat. 2-Way Volume:  $T = 7.85(X) + -256.19, R^2 = 0.85$   
Sat. Pk Hr. Total:  $T = .41(X) + 19.23$   
 $R^2 = 0.56, 0 \text{ Enter}, 0 \text{ Exit}$   
Sun. 2-Way Volume:  $T = 6.42(X) + -101.12, R^2 = 0.82$   
Sun. Pk Hr. Total:  $0$   
 $R^2 = 0, 0 \text{ Enter}, 0 \text{ Exit}$

Note: A zero indicates no data available.

Source: Institute of Transportation Engineers  
Trip Generation Manual, 9th Edition, 2012

TRIP GENERATION 2013, TRAFFICWARE, LLC












# **CAPACITY ANALYSIS WORKSHEETS**

## BACKGROUND TRAFFIC VOLUMES

# HCM Unsignalized Intersection Capacity Analysis 2: Conantville Road & Storrs Road

2017 Background Traffic  
A.M. Peak Hour

















|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Volume (veh/h)                    | 19                                                                                | 12                                                                                | 9                                                                                 | 420                                                                               | 320                                                                               | 21                                                                                |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Hourly flow rate (vph)            | 21                                                                                | 13                                                                                | 10                                                                                | 457                                                                               | 348                                                                               | 23                                                                                |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 835                                                                               | 359                                                                               | 371                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 835                                                                               | 359                                                                               | 371                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.4                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 94                                                                                | 98                                                                                | 99                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 335                                                                               | 685                                                                               | 1188                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume Total                      | 34                                                                                | 466                                                                               | 371                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Volume Left                       | 21                                                                                | 10                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Volume Right                      | 13                                                                                | 0                                                                                 | 23                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cSH                               | 417                                                                               | 1188                                                                              | 1700                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.08                                                                              | 0.01                                                                              | 0.22                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Queue Length 95th (ft)            | 7                                                                                 | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Control Delay (s)                 | 14.4                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Lane LOS                          | B                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 14.4                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   | 0.7                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   | 39.3%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   | A                                                                                 |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

# HCM Unsignalized Intersection Capacity Analysis

## 5: Meadowbrook Lane & Adeline Place

2017 Background Traffic

A.M. Peak Hour










|                        |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations    |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                    |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)         | 3                                                                                 | 7                                                                                 | 8                                                                                 | 1                                                                                 | 3                                                                                 | 0                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Sign Control           |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                    |                                                                                     | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                  |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                    |                                                                                     | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Peak Hour Factor       | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph) | 3                                                                                 | 8                                                                                 | 9                                                                                 | 1                                                                                 | 3                                                                                 | 0                                                                                  | 2                                                                                   | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Pedestrians            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type            |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)   |                                                                                   | 760                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume | 3                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 25                                                                                  | 24                                                                                  | 12                                                                                  | 25                                                                                  | 28                                                                                  | 3                                                                                   |
| vC1, stage 1 conf vol  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol     | 3                                                                                 |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                    | 25                                                                                  | 24                                                                                  | 12                                                                                  | 25                                                                                  | 28                                                                                  | 3                                                                                   |
| tC, single (s)         | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                    | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                 | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                    | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %        | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                    | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)    | 1619                                                                              |                                                                                   |                                                                                   | 1601                                                                              |                                                                                   |                                                                                    | 983                                                                                 | 867                                                                                 | 1069                                                                                | 983                                                                                 | 862                                                                                 | 1081                                                                                |
| Direction, Lane #      | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total           | 20                                                                                | 4                                                                                 | 3                                                                                 | 3                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left            | 3                                                                                 | 1                                                                                 | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right           | 9                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                    | 1619                                                                              | 1601                                                                              | 1010                                                                              | 1013                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity     | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              | 0.00                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)      | 1.2                                                                               | 1.8                                                                               | 8.6                                                                               | 8.6                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS               | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)     | 1.2                                                                               | 1.8                                                                               | 8.6                                                                               | 8.6                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS           |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

### Intersection Summary

|                                   |       |                      |   |  |
|-----------------------------------|-------|----------------------|---|--|
| Average Delay                     | 2.9   |                      |   |  |
| Intersection Capacity Utilization | 13.3% | ICU Level of Service | A |  |
| Analysis Period (min)             | 15    |                      |   |  |

















# HCM Unsignalized Intersection Capacity Analysis 2: Conantville Road & Storrs Road

2017 Background Traffic  
P.M. Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|--|--|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |  |  |  |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |  |  |  |
| Volume (veh/h)                    | 27                                                                                | 15                                                                                | 9                                                                                 | 463                                                                               | 617                                                                               | 24                                                                                |  |  |  |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |  |  |  |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |  |  |  |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |  |  |  |
| Hourly flow rate (vph)            | 29                                                                                | 16                                                                                | 10                                                                                | 503                                                                               | 671                                                                               | 26                                                                                |  |  |  |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |  |  |  |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                              |                                                                                   |  |  |  |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |  |  |  |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |  |  |  |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |  |  |  |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| vC, conflicting volume            | 1223                                                                              | 684                                                                               | 697                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| vCu, unblocked vol                | 1223                                                                              | 684                                                                               | 697                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| tC, single (s)                    | 6.4                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| p0 queue free %                   | 85                                                                                | 96                                                                                | 99                                                                                |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| cM capacity (veh/h)               | 193                                                                               | 449                                                                               | 899                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Volume Total                      | 46                                                                                | 513                                                                               | 697                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Volume Left                       | 29                                                                                | 10                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Volume Right                      | 16                                                                                | 0                                                                                 | 26                                                                                |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| cSH                               | 243                                                                               | 899                                                                               | 1700                                                                              |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Volume to Capacity                | 0.19                                                                              | 0.01                                                                              | 0.41                                                                              |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Queue Length 95th (ft)            | 17                                                                                | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Control Delay (s)                 | 23.2                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Lane LOS                          | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Approach Delay (s)                | 23.2                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Average Delay                     |                                                                                   | 1.0                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |
| Intersection Capacity Utilization |                                                                                   | 43.9%                                                                             | ICU Level of Service                                                              |                                                                                   | A                                                                                 |                                                                                   |  |  |  |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |  |  |  |

# HCM Unsignalized Intersection Capacity Analysis 5: Meadowbrook Lane & Adeline Place










2017 Background Traffic  
P.M. Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 9                                                                                 | 6                                                                                 | 1                                                                                 | 16                                                                                | 5                                                                                 | 6                                                                                  | 4                                                                                   | 0                                                                                   | 4                                                                                   | 1                                                                                   | 2                                                                                   |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 10                                                                                | 7                                                                                 | 1                                                                                 | 17                                                                                | 5                                                                                 | 7                                                                                  | 4                                                                                   | 0                                                                                   | 4                                                                                   | 1                                                                                   | 2                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   | 760                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 23                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 42                                                                                 | 42                                                                                  | 13                                                                                  | 42                                                                                  | 43                                                                                  | 20                                                                                  |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 23                                                                                |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |                                                                                   | 42                                                                                 | 42                                                                                  | 13                                                                                  | 42                                                                                  | 43                                                                                  | 20                                                                                  |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 99                                                                                 | 99                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1592                                                                              |                                                                                   |                                                                                   | 1601                                                                              |                                                                                   |                                                                                   | 956                                                                                | 848                                                                                 | 1067                                                                                | 956                                                                                 | 847                                                                                 | 1058                                                                                |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 18                                                                                | 24                                                                                | 11                                                                                | 8                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 1                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 7                                                                                 | 5                                                                                 | 0                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1592                                                                              | 1601                                                                              | 910                                                                               | 965                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.01                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.9                                                                               | 0.3                                                                               | 9.0                                                                               | 8.8                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.9                                                                               | 0.3                                                                               | 9.0                                                                               | 8.8                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 3.1                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.3%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# COMBINED TRAFFIC VOLUMES

# HCM Unsignalized Intersection Capacity Analysis 2: Conantville Road & Storrs Road

















2017 Combined Traffic  
A.M. Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Volume (veh/h)                    | 34                                                                                | 16                                                                                | 10                                                                                | 420                                                                               | 320                                                                               | 25                                                                                |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Hourly flow rate (vph)            | 37                                                                                | 17                                                                                | 11                                                                                | 457                                                                               | 348                                                                               | 27                                                                                |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 840                                                                               | 361                                                                               | 375                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 840                                                                               | 361                                                                               | 375                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.4                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 89                                                                                | 97                                                                                | 99                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 332                                                                               | 683                                                                               | 1183                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | EB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume Total                      | 54                                                                                | 467                                                                               | 375                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Volume Left                       | 37                                                                                | 11                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Volume Right                      | 17                                                                                | 0                                                                                 | 27                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cSH                               | 398                                                                               | 1183                                                                              | 1700                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.14                                                                              | 0.01                                                                              | 0.22                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Queue Length 95th (ft)            | 12                                                                                | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Control Delay (s)                 | 15.5                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Lane LOS                          | C                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 15.5                                                                              | 0.3                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 1.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 40.1%                                                                             | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |



# HCM Unsignalized Intersection Capacity Analysis 5: Meadowbrook Lane & Adeline Place

2017 Combined Traffic  
A.M. Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)                    | 3                                                                                 | 26                                                                                | 14                                                                                | 1                                                                                 | 8                                                                                 | 0                                                                                 | 4                                                                                  | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 3                                                                                 | 28                                                                                | 15                                                                                | 1                                                                                 | 9                                                                                 | 0                                                                                 | 4                                                                                  | 0                                                                                   | 1                                                                                   | 2                                                                                   | 0                                                                                   | 1                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 9                                                                                 |                                                                                   |                                                                                   | 43                                                                                |                                                                                   |                                                                                   | 54                                                                                 | 53                                                                                  | 36                                                                                  | 54                                                                                  | 61                                                                                  | 9                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 9                                                                                 |                                                                                   |                                                                                   | 43                                                                                |                                                                                   |                                                                                   | 54                                                                                 | 53                                                                                  | 36                                                                                  | 54                                                                                  | 61                                                                                  | 9                                                                                   |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                                | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1611                                                                              |                                                                                   |                                                                                   | 1565                                                                              |                                                                                   |                                                                                   | 941                                                                                | 836                                                                                 | 1037                                                                                | 941                                                                                 | 828                                                                                 | 1073                                                                                |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 47                                                                                | 10                                                                                | 5                                                                                 | 3                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 3                                                                                 | 1                                                                                 | 4                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 15                                                                                | 0                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1611                                                                              | 1565                                                                              | 958                                                                               | 981                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.01                                                                              | 0.00                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.5                                                                               | 0.8                                                                               | 8.8                                                                               | 8.7                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.5                                                                               | 0.8                                                                               | 8.8                                                                               | 8.7                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 1.7                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.3%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |










# HCM Unsignalized Intersection Capacity Analysis 8: Meadowbrook Lane & Meadowbrook Gardens

2017 Combined Traffic  
A.M. Peak Hour

|                                   | →    | ↘     | ↙                    | ←    | ↖    | ↗    |
|-----------------------------------|------|-------|----------------------|------|------|------|
| Movement                          | EBT  | EBR   | WBL                  | WBT  | NBL  | NBR  |
| Lane Configurations               | ↰    |       |                      | ↱    | ↰    | ↱    |
| Volume (veh/h)                    | 22   | 7     | 7                    | 8    | 25   | 25   |
| Sign Control                      | Free |       |                      | Free | Stop |      |
| Grade                             | 0%   |       |                      | 0%   | 0%   |      |
| Peak Hour Factor                  | 0.92 | 0.92  | 0.92                 | 0.92 | 0.92 | 0.92 |
| Hourly flow rate (vph)            | 24   | 8     | 8                    | 9    | 27   | 27   |
| Pedestrians                       |      |       |                      |      |      |      |
| Lane Width (ft)                   |      |       |                      |      |      |      |
| Walking Speed (ft/s)              |      |       |                      |      |      |      |
| Percent Blockage                  |      |       |                      |      |      |      |
| Right turn flare (veh)            |      |       |                      |      |      |      |
| Median type                       | None |       |                      | None |      |      |
| Median storage veh                |      |       |                      |      |      |      |
| Upstream signal (ft)              |      |       |                      |      |      |      |
| pX, platoon unblocked             |      |       |                      |      |      |      |
| vC, conflicting volume            |      |       | 32                   |      | 52   | 28   |
| vC1, stage 1 conf vol             |      |       |                      |      |      |      |
| vC2, stage 2 conf vol             |      |       |                      |      |      |      |
| vCu, unblocked vol                |      |       | 32                   |      | 52   | 28   |
| tC, single (s)                    |      |       | 4.1                  |      | 6.4  | 6.2  |
| tC, 2 stage (s)                   |      |       |                      |      |      |      |
| tF (s)                            |      |       | 2.2                  |      | 3.5  | 3.3  |
| p0 queue free %                   |      |       | 100                  |      | 97   | 97   |
| cM capacity (veh/h)               |      |       | 1581                 |      | 952  | 1048 |
| Direction, Lane #                 | EB 1 | WB 1  | NB 1                 |      |      |      |
| Volume Total                      | 32   | 16    | 54                   |      |      |      |
| Volume Left                       | 0    | 8     | 27                   |      |      |      |
| Volume Right                      | 8    | 0     | 27                   |      |      |      |
| cSH                               | 1700 | 1581  | 998                  |      |      |      |
| Volume to Capacity                | 0.02 | 0.00  | 0.05                 |      |      |      |
| Queue Length 95th (ft)            | 0    | 0     | 4                    |      |      |      |
| Control Delay (s)                 | 0.0  | 3.4   | 8.8                  |      |      |      |
| Lane LOS                          |      | A     | A                    |      |      |      |
| Approach Delay (s)                | 0.0  | 3.4   | 8.8                  |      |      |      |
| Approach LOS                      |      |       | A                    |      |      |      |
| Intersection Summary              |      |       |                      |      |      |      |
| Average Delay                     |      | 5.2   |                      |      |      |      |
| Intersection Capacity Utilization |      | 16.7% | ICU Level of Service | A    |      |      |
| Analysis Period (min)             |      | 15    |                      |      |      |      |

















# HCM Unsignalized Intersection Capacity Analysis 2: Conantville Road & Storrs Road

2017 Combined Traffic  
P.M. Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBR                                                                               | NBL                                                                               | NBT                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Volume (veh/h)                    | 36                                                                                | 17                                                                                | 13                                                                                | 463                                                                               | 617                                                                               | 41                                                                                |
| Sign Control                      | Stop                                                                              |                                                                                   |                                                                                   | Free                                                                              | Free                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Hourly flow rate (vph)            | 39                                                                                | 18                                                                                | 14                                                                                | 503                                                                               | 671                                                                               | 45                                                                                |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 16                                                                                |                                                                                   |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                              |                                                                                   |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       |                                                                                   |                                                                                   |                                                                                   | None                                                                              | None                                                                              |                                                                                   |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            | 1240                                                                              | 693                                                                               | 715                                                                               |                                                                                   |                                                                                   |                                                                                   |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                | 1240                                                                              | 693                                                                               | 715                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, single (s)                    | 6.4                                                                               | 6.2                                                                               | 4.1                                                                               |                                                                                   |                                                                                   |                                                                                   |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            | 3.5                                                                               | 3.3                                                                               | 2.2                                                                               |                                                                                   |                                                                                   |                                                                                   |
| p0 queue free %                   | 79                                                                                | 96                                                                                | 98                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cM capacity (veh/h)               | 188                                                                               | 443                                                                               | 885                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Direction, Lane #                 | EB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume Total                      | 58                                                                                | 517                                                                               | 715                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Volume Left                       | 39                                                                                | 14                                                                                | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Volume Right                      | 18                                                                                | 0                                                                                 | 45                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cSH                               | 230                                                                               | 885                                                                               | 1700                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.25                                                                              | 0.02                                                                              | 0.42                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Queue Length 95th (ft)            | 24                                                                                | 1                                                                                 | 0                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Control Delay (s)                 | 25.8                                                                              | 0.5                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Lane LOS                          | D                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 25.8                                                                              | 0.5                                                                               | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      | D                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   | 1.3                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   | 45.0%                                                                             |                                                                                   | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |










# HCM Unsignalized Intersection Capacity Analysis 5: Meadowbrook Lane & Adeline Place

2017 Combined Traffic  
P.M. Peak Hour

|                                   |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                          | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations               |                                                                                   |  |                                                                                   |                                                                                   |  |                                                                                   |                                                                                    |  |                                                                                     |                                                                                     |  |                                                                                     |
| Volume (veh/h)                    | 2                                                                                 | 20                                                                                | 10                                                                                | 1                                                                                 | 37                                                                                | 5                                                                                 | 14                                                                                 | 4                                                                                   | 0                                                                                   | 4                                                                                   | 1                                                                                   | 2                                                                                   |
| Sign Control                      |                                                                                   | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              |                                                                                   |                                                                                    | Stop                                                                                |                                                                                     |                                                                                     | Stop                                                                                |                                                                                     |
| Grade                             |                                                                                   | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                |                                                                                   |                                                                                    | 0%                                                                                  |                                                                                     |                                                                                     | 0%                                                                                  |                                                                                     |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Hourly flow rate (vph)            | 2                                                                                 | 22                                                                                | 11                                                                                | 1                                                                                 | 40                                                                                | 5                                                                                 | 15                                                                                 | 4                                                                                   | 0                                                                                   | 4                                                                                   | 1                                                                                   | 2                                                                                   |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median type                       |                                                                                   | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC, conflicting volume            | 46                                                                                |                                                                                   |                                                                                   | 33                                                                                |                                                                                   |                                                                                   | 79                                                                                 | 79                                                                                  | 27                                                                                  | 79                                                                                  | 82                                                                                  | 43                                                                                  |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| vCu, unblocked vol                | 46                                                                                |                                                                                   |                                                                                   | 33                                                                                |                                                                                   |                                                                                   | 79                                                                                 | 79                                                                                  | 27                                                                                  | 79                                                                                  | 82                                                                                  | 43                                                                                  |
| tC, single (s)                    | 4.1                                                                               |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   |                                                                                   | 7.1                                                                                | 6.5                                                                                 | 6.2                                                                                 | 7.1                                                                                 | 6.5                                                                                 | 6.2                                                                                 |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| tF (s)                            | 2.2                                                                               |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   |                                                                                   | 3.5                                                                                | 4.0                                                                                 | 3.3                                                                                 | 3.5                                                                                 | 4.0                                                                                 | 3.3                                                                                 |
| p0 queue free %                   | 100                                                                               |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                   | 98                                                                                 | 99                                                                                  | 100                                                                                 | 100                                                                                 | 100                                                                                 | 100                                                                                 |
| cM capacity (veh/h)               | 1562                                                                              |                                                                                   |                                                                                   | 1579                                                                              |                                                                                   |                                                                                   | 905                                                                                | 809                                                                                 | 1048                                                                                | 905                                                                                 | 806                                                                                 | 1027                                                                                |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              | SB 1                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Total                      | 35                                                                                | 47                                                                                | 20                                                                                | 8                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Left                       | 2                                                                                 | 1                                                                                 | 15                                                                                | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume Right                      | 11                                                                                | 5                                                                                 | 0                                                                                 | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| cSH                               | 1562                                                                              | 1579                                                                              | 882                                                                               | 920                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Volume to Capacity                | 0.00                                                                              | 0.00                                                                              | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 95th (ft)            | 0                                                                                 | 0                                                                                 | 2                                                                                 | 1                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Delay (s)                 | 0.5                                                                               | 0.2                                                                               | 9.2                                                                               | 8.9                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane LOS                          | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach Delay (s)                | 0.5                                                                               | 0.2                                                                               | 9.2                                                                               | 8.9                                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS                      |                                                                                   |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Average Delay                     |                                                                                   |                                                                                   | 2.5                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 13.3%                                                                             |                                                                                   | ICU Level of Service                                                              |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

# HCM Unsignalized Intersection Capacity Analysis 8: Meadowbrook Lane & Meadowbrook Gardens

2017 Combined Traffic  
P.M. Peak Hour

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Movement                          | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations               |  |                                                                                   |                                                                                   |  |  |                                                                                   |
| Volume (veh/h)                    | 19                                                                                | 29                                                                                | 29                                                                                | 28                                                                                | 15                                                                                | 15                                                                                |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Grade                             | 0%                                                                                |                                                                                   |                                                                                   | 0%                                                                                | 0%                                                                                |                                                                                   |
| Peak Hour Factor                  | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              |
| Hourly flow rate (vph)            | 21                                                                                | 32                                                                                | 32                                                                                | 30                                                                                | 16                                                                                | 16                                                                                |
| Pedestrians                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Width (ft)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Walking Speed (ft/s)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Percent Blockage                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Right turn flare (veh)            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Median type                       | None                                                                              |                                                                                   |                                                                                   | None                                                                              |                                                                                   |                                                                                   |
| Median storage (veh)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Upstream signal (ft)              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| pX, platoon unblocked             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC, conflicting volume            |                                                                                   |                                                                                   | 52                                                                                |                                                                                   | 130                                                                               | 36                                                                                |
| vC1, stage 1 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vC2, stage 2 conf vol             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| vCu, unblocked vol                |                                                                                   |                                                                                   | 52                                                                                |                                                                                   | 130                                                                               | 36                                                                                |
| tC, single (s)                    |                                                                                   |                                                                                   | 4.1                                                                               |                                                                                   | 6.4                                                                               | 6.2                                                                               |
| tC, 2 stage (s)                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| tF (s)                            |                                                                                   |                                                                                   | 2.2                                                                               |                                                                                   | 3.5                                                                               | 3.3                                                                               |
| p0 queue free %                   |                                                                                   |                                                                                   | 98                                                                                |                                                                                   | 98                                                                                | 98                                                                                |
| cM capacity (veh/h)               |                                                                                   |                                                                                   | 1554                                                                              |                                                                                   | 847                                                                               | 1036                                                                              |
| Direction, Lane #                 | EB 1                                                                              | WB 1                                                                              | NB 1                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Volume Total                      | 52                                                                                | 62                                                                                | 33                                                                                |                                                                                   |                                                                                   |                                                                                   |
| Volume Left                       | 0                                                                                 | 32                                                                                | 16                                                                                |                                                                                   |                                                                                   |                                                                                   |
| Volume Right                      | 32                                                                                | 0                                                                                 | 16                                                                                |                                                                                   |                                                                                   |                                                                                   |
| cSH                               | 1700                                                                              | 1554                                                                              | 932                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Volume to Capacity                | 0.03                                                                              | 0.02                                                                              | 0.03                                                                              |                                                                                   |                                                                                   |                                                                                   |
| Queue Length 95th (ft)            | 0                                                                                 | 2                                                                                 | 3                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Control Delay (s)                 | 0.0                                                                               | 3.8                                                                               | 9.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Lane LOS                          |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Approach Delay (s)                | 0.0                                                                               | 3.8                                                                               | 9.0                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Approach LOS                      |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Average Delay                     |                                                                                   |                                                                                   | 3.6                                                                               |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization |                                                                                   |                                                                                   | 19.7%                                                                             | ICU Level of Service                                                              | A                                                                                 |                                                                                   |
| Analysis Period (min)             |                                                                                   |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |